FACILITY SOLUTIONS GROUP
SAFETY MANUAL

Facility Solutions Group

EXECUTIVE Message

Our objective is to make FSG a premier institution in the electrical industry. Achieving this objective will require the things you might expect like a passion for quality work, customer satisfaction and excellent productivity. What you may not expect or understand is how critical safety and health is to everyone's success.

Facility Solutions Group's Safety Management System is designed to:

- **Establish, document, implement, maintain and continually improve our Safety Management System in accordance with the requirements of OHSAS 18001/45001; as well as all applicable federal, state and local regulations impacting our business**
- **Train all stakeholders, management, supervisors and employees on the importance and requirements of the Safety Management System**
- **Train all employees on the proper and safe way to perform their work**
- **Conduct hazard surveys and audits to identify and prevent any conditions that may lead to accidents or injuries and provide feedback for continual improvement**
- **Hold employees and subcontractors accountable for their safety and health**
- **Protect the public and others stakeholders whose safety and health may be affected by the activities of our organization**

A fundamental part of our program is to recognize that we are indeed responsible for everyone's safety.

In the pursuit of our combined success and well-being, we urge you to reject the notion that "accidents happen" or that they are an "inevitable part" of our business. Accidents are primarily the result of unsafe acts and/or unsafe conditions. Therefore, our Safety Management System outlines how we intend to safely conduct our business. We encourage your opinions; as well as your suggestions, and we are always open to modifying or amending the Safety Management System in ways that will lead to continual improvement.

Please join us in building a culture that is committed to a safe, accident free institution.

Executive Board

Bill Graham
Bob Graham
Steven Byrne
Alan Giroux
Sam Smith
Gary Roy
Mark Mitchell
Steve Frank
Jason Zipprian
Bernie Erickson

Safety Council

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Jaime Villarreal
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DOCUMENT CONTROL

1.0 Purpose

This procedure describes the identification, maintenance and disposition of safety management system records.

2.0 Scope

This procedure applies to all records established to demonstrate conformity to the requirements of Facility Solutions Group SMS and OHSAS 18001 requirements. These records shall include, but not be limited to procedures, forms, training records, results of audits, reviews, and monitoring records.

3.0 Reference Documents

- SMS **Safety Management System**
- SMS-DC **Document Control**

4.0 Definitions

DRM	Director of Risk Management
CM	Claims Manager
SRM	Safety Risk Manager
SC	Safety Council
SMS	Safety Management System
SOP	Standard Operating Procedure(s)

5.0 Responsibility

5.1 Safety Management System Representative
The Director of Risk Management (DRM) or his/her designee shall ensure the requirements of this procedure are effectively implemented at Facility Solutions Group as a whole, and be responsible for maintaining the Master List of Safety Records.

5.2 Safety Risk Manager
The Safety Risk Manager (SRM) shall ensure the requirements stipulated in this procedure are effectively implemented in the functions / departments concerned, and the safety records are maintained and kept in a satisfactory manner.

6.0 Procedure

6.1 All safety records shall be legible, identifiable and traceable to the activities involved. They may be in the form of any type of media such as hard copy or electronic media.

6.2 Safety records shall be collected in an office or in facilities where they shall be filed or electronically stored and maintained to ensure ready access and preservation against damage, deterioration and loss.

6.3 The DRM or his/her designee is responsible for collecting and checking the records and collection methods.

6.4 The DRM or his/her designee shall maintain and update the Master List of Safety Records, which specifies the type/name of records, the form number, the party responsible for keeping the record, and the retention time.

6.5 Safety records shall be kept in appropriate storage for the following minimum retention periods:

- 5 years,
- or as specified in the SMS Procedure,
- or as required by statute.

6.6 Once the retention period has expired the DRM shall decide and authorize the disposal of relevant records.

7.0 Records

Records as specified in the Master List of Safety Records.

ROLES AND RESPONSIBILITY

Everyone will be held responsible and accountable under the Safety Management System so that we protect employees and others, whose health and safety may be affected by the activities of FSG

Management is responsible for providing a safe work environment by:

- ✓ Providing resources to establish, document, implement, maintain and continually improve the Safety Management System in accordance with the requirements of OHSAS 18001/45001; as well as, all applicable federal, state and local regulations.
- ✓ Assuring conformance with all Safety Management System Policies,
- ✓ Demonstrating Conformance of the Safety Management System to others.
- ✓ Communicating the expectations and responsibilities under the Safety Management System to all employees.
- ✓ Providing the Safety Management System to public stakeholders upon request.
- ✓ Providing resources for the required personal protective equipment.
- ✓ Providing resources for continual safety education and training.

Safety Management is responsible for providing safe work environments by:

- ✓ Establish, document, implement, maintain and continually improve the Safety Management System in accordance with the requirements of OHSAS 18001/45001, as well as, all applicable federal, state and local regulations.
- ✓ Reviewing the Safety Management System yearly to ensure that it remains relevant and appropriate to FSG operations.
- ✓ Train all stakeholders, management, supervisors and employees on the importance and requirements of this Safety Management System.
- ✓ Train all employees on the proper and safe way to perform their work.
- ✓ Conduct hazard surveys and audits to prevent any conditions that may lead to accidents or injuries and provide feedback for continual improvement.
- ✓ Hold all employees and subcontractors accountable for their safety and health.
- ✓ Protect the public and other stakeholders whose safety and health may be affected by the activities of FSG.
- ✓ Providing the Safety Management System to public stakeholders upon request.
- ✓ Immediately stopping work activities that endanger self, others, and/or property.

Leaders of work activities (supervision) are responsible for providing safe work environments by:

- ✓ Assuring conformance with all Safety Management System procedures.
- ✓ Assuring personnel have the proper tools for all routine and non-routine tasks.
- ✓ Assuring personnel have the proper equipment for all routine and non-routine tasks.
- ✓ Assuring personnel are qualified, and have the knowledge and skills to perform any work assigned.
- ✓ Assuring all non-conformances are handled according to Safety Management System procedures.
- ✓ Immediately stopping work activities that endanger self, others, and/or property.

Employees are accountable for providing safe work environments by:

- ✓ Using company mandated safe work practices and PPE per Safety Management System procedures.
- ✓ Immediately stopping work activities that endanger self, others, and/or property.
- ✓ Notifying supervisors of unsafe conditions or unsafe acts of others so corrections can be made.

Sub Contractors are accountable for providing safe work environments by:

- ✓ Assuring conformance with all FSG Safety Management System procedures.
- ✓ Assuring conformance with all FSG Safety Management System prequalification requirements.
- ✓ Assuring their personnel have the proper tools for assigned work.
- ✓ Assuring their personnel have the proper equipment for assigned work.
- ✓ Assuring their personnel are qualified, and have the knowledge and skills to perform any work contracted.
- ✓ Assuring all non-conformances are handled according to the FSG Safety Management System Procedures.
- ✓ Immediately stopping work activities that endanger self, others, property or the public.
- ✓ Notifying FSG of unsafe conditions or unsafe acts so corrections can be made.

Any breach of the above roles and responsibilities MUST be handled according to the progressive disciplinary process defined in the Disciplinary Process for Safety Violations section.

SAFETY MANAGEMENT SYSTEM

1.0 Definitions

1.1 **ACCIDENT** — Unplanned/Undesired event giving rise to death, ill health, injury, damage or other losses to personnel or property.

1.2 **APPROVED** — Acceptable to the authorities having jurisdiction.

1.3 **AUDIT** — A systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which defined criteria are fulfilled.

1.4 **AUTHORIZATION** — Permission or power granted by an authority.

1.5 **AWARENESS** — Does not necessarily imply understanding, just an ability to be conscious of, feel or perceive.

1.6 **CERTIFICATION** — To confirm formally as true, accurate, or genuine.

1.7 **CONTINUAL IMPROVEMENT** — Re-occurring process of enhancing the safety management system, to achieve improvements in overall OHS performance

1.8 **COMPETENT PERSON** — The person designated by the Safety Risk Manager (SRM) and/or Division Manager (or designee) to identify existing or predictable hazards and unsafe working conditions and who has authority to take prompt corrective measures to control or eliminate these hazards or unsafe working conditions.

1.9 **HAZARD** — A source or a situation with a potential to cause harm in terms of human injury or ill health, damage to property, damage to the environment or a combination of these.

1.10 **HAZARD IDENTIFICATION** — The process of recognizing a hazard in existence and defining its characteristics/ impact.

1.11 **INCIDENT** — Event that gives rise to an accident or has the potential to lead to an accident.

1.12 **INTERESTED PARTY** — An individual or group concerned with or affected by the SMS performance of FSG.

1.1 **JOURNEYMAN EQUIVALENT** — To the extent that a Journeyman license is recognized in a state, this designation will be the minimum. If not recognized, the equivalent in experience and knowledge, as determined by the Branch Manager will suffice.

1.14 **MODIFIED DUTY** — An offer for temporary work assignment made to a worker who is recovering from an illness or injury.

1.15 **NON-CONFORMITY** — Non-fulfillment of a requirement of the Safety Management System.

1.16 **OCCUPATIONAL ILL HEALTH** — Ill health that is judged to have been caused by or made worse by a person's work activity or environment.

1.17 **OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM** — A set of interrelated or interacting elements to establish OH&S Policy and objectives, and to achieve those objectives.

1.18 **OCCUPATIONAL HEALTH AND SAFETY OBJECTIVES** — Overall goals in terms of OH&S performance, arising from the OH&S policy that FSG sets itself to achieve, and which is quantified where practicable.

1.19 **OCCUPATIONAL HEALTH AND SAFETY PROCEDURE** — Overall intentions and direction of an organization in relation to its overall OH&S performance as formally expressed by top management.

1.20 **OCCUPATIONAL HEALTH AND SAFETY PROFESSIONAL** — A person with expertise and qualifications in the assessment, evaluation, prevention, or control of occupational risks, hazards or occupational ill health.

1.21 **OCCUPATIONAL HEALTH AND SAFETY TARGET** — A detailed performance requirement quantified wherever practicable pertaining to FSG, that arises from the health and safety objectives and that needs to be met in order to achieve those objectives.

1.22 **OCCUPATIONAL HEALTH SURVEILLANCE** — Monitoring the health of people to detect signs or symptoms of work related ill health so that steps can be taken to eliminate, or reduce the probability of further deterioration.

1.23 **QUALIFIED PERSON** — A person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

1.24 **REHABILITATION** — The managed process of maintaining injured or ill employees in, or returning them to suitable employment.

1.25 **RISK** — The combination of frequency, or probability of occurrence and consequence of a specified hazardous event.

1.26 **RISK ANALYSIS** — A systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

1.27 **RISK ASSESSMENT** — The overall process of estimating the magnitude of risk and deciding whether the risk is tolerable.

1.28 **SAFETY** — State in which the risk of harm to persons or damage to property is limited to a tolerable level.

1.29 **SAFETY STANDBY PERSON** — Performs no other task except observing the work to be done and ensures that safety and work procedures are being followed.

1.30 **TOLERABLE RISK** — Risk that has been reduced to a level that can be endured by the organization in regards to its legal obligations and its own OH&S Policy.

1.31 **TRAINING** – The education, instruction, or discipline of a person that is being trained by FSG personnel or prior FSG approved material.

1.32 **MUST, SHOULD, MAY** AND **SHALL**:

MUST – Indicates a mandatory requirement

SHOULD – Indicates a recommended action

MAY – Indicates an optional or permissive action, not a requirement or recommendation

SHALL – Indicates a future action

2.0 Safety Systems

This program has been designed to meet or exceed the following minimum standard safety guidelines:

2.1 Enterprise Risk Management, ISO 30001

2.2 Occupational Safety and Health, OHSAS 18001/45001

2.3 Environmental Management, ISO 14001

2.4 OSHA 1910 General Industry

2.5 OSHA 1926 Construction

2.6 NFPA 70 2014 (National Electric Code)

2.7 NFPA 70E Standard for Electrical Safety

3.0 Organization (Reference Org Chart Pg.17)

3.1 Director of Risk Management (DRM)

3. 2 Corporate Safety Council (CSC)

3. 3 Incident Committee

3. 4 Safety Risk Managers (SRM)

3. 5 Claims Manager (CM)

3. 6 Safety Coordinators (SC)

3. 7 **Branch Safety Committee**
The Branch Safety Committee should meet quarterly (at least) to review the status of the safety record and Safety Management System. All employees are welcomed and encouraged to provide ideas and/or concerns to this committee. The Safety Committee should assist the Corporate Safety Council with the implementation of all safety programs. The individual experiences, unique trainings and specialized training of all the committee members will aid in the implementation process.

Members may include, but are not limited to:
- Market Directors or Branch Managers
- Apprentices
- Journeyman (or equivalent)
- Project Managers
- Safety Risk Managers (SRM)
- Safety Coordinators (SC)

4.0 Training

4.1 **NEW HIRE ORIENTATION** — All new hires must receive minimum safety awareness training during orientation on FSG safety policies and procedures. Topics covered are: safety awareness training and materials relevant to that employee's foreseeable duties, exposures including awareness training in fall protection, hazard communication, ladder safety, scaffold, Lock Out/Tag Out (LO/TO), and trenching. This material consists of video training, Safety Handbook, and testing to be administered by the local SRM or SC. In addition, Ladder/Fall Protection, Electrical Hazard Awareness, LO/TO, Meter Proficiency and Electrical Safe Work (where applicable) **must be given before an employee commences work**.

4.2 **CONTINUING SAFETY EDUCATION** — Safety training education must be conducted according to the standards outlined per the company-defined safety program. (Reference **APX-019A Training Matrix**.)

5.0 Meetings

5.1 On all company construction jobsites, employees must receive a site-specific safety orientation prior to beginning work. This orientation should include site requirements, client requirements and other standards that apply uniquely to the work site. (Reference **APX-003E Jobsite Safety Orientation**)

5.2 On all company jobsites that use temporary employees, temporary employees must receive a site-specific safety orientation prior to beginning work. This orientation must include site requirements, client requirements and other standards that apply uniquely to the work site. (Reference **APX-003D Jobsite Safety Orientation Temp Employees**)

5.3 Weekly safety meetings must be conducted in all departments. This process applies to the following work sites:

- Construction work sites
- Service employees
- Shops
- Office

6.0 Communications

Branch and construction jobsite offices must have the following posted or available (Reference **APX-003A Startup Safety Checklist**) :

- Locate and post emergency care facilities for the treatment of injuries and illnesses and post it on job board.
- Required Labor and OSHA postings.
- SDS book (Reference **SMS-009 Hazard Communication**).
- Yearly OSHA 300A Summary from February 1st to April 30th.

7.0 Incident Reporting

7.1 Personnel must report all injuries, illnesses and other work-related incidents immediately to their SRM or SC. ALL incidents must be reported immediately to the SRM or SC. The SRM will report the claim to the CM or DRM. (Reference **SMS-004 Incident Procedure**).

7.2 All incidents arising out of FSG operations must be properly investigated, reported and managed. All personnel involved are to follow instructions and participate fully. Only the DRM (or a designee) is allowed to speak with any media representative, investigator outside of the company, or third party.

This applies to all incidents occurring in the course of and/or arising from work activities conducted by FSG employees.

7.3 Reporting and investigating incidents or events are secondary to employees receiving immediate care for occupational injuries and illnesses regardless of severity. Upon meeting the immediate needs of the injured, the reporting, investigative, and claims management procedures apply. (Reference **SMS-004 Incident Procedures**).

7.4 When appropriate, reporting and medical facility arrangements must be identified and communicated.

7.5 As preferred medical facilities are identified, the CM will furnish the medical facilities with all applicable instructions on internal claims management practices and for inclusion on site-specific safety plans.

7.6 Personnel are required to submit to a substance test immediately following all incidents.

7.7 Each site must have medical treatment processes established. All personnel are to inform their supervisor BEFORE seeking any initial medical treatment for work-related incidents, even after normal work hours.

7.8 A supervisor or another company representative must accompany or meet the injured employee for any initial medical treatment.

7.9 If medical attention was sought without the supervisor or other company representative being present, the injured employee is to immediately contact the supervisor to inform them of their medical status and make arrangements to provide any applicable paperwork received through the initial treatment process.

7.0 Incident Reporting (continued)

7.10 Personnel working with restrictions are to follow the medical guidance of their treating physician and instructions provided by the designee of FSG responsible for their activities while on modified duty (including showing up to work at the times and locations of instruction).

7.11 All investigations and related documentation must be immediately initiated by the SRM and be completed no later than 24 hours after the incident/accident occurred. (Reference **SMS-004 Incident Procedure**).

7.12 All completed documentation and statements obtained in the course of the investigation must be provided to the CM and DRM. Local confidentiality and laws regarding medical privacy should be maintained.

7.13 The SRM or SC must conduct a Root Cause investigation on all recordable injuries and serious losses.

7.14 The incident scene should be secured and photographed, depending upon the severity of the incident event.

7.15 In cases of fatality or severe injury requiring hospitalization contact the DRM or CM immediately before proceeding to 7.16.

7.16 Statements from all involved parties are required. If written statements will not be provided by any involved parties, oral statements can be transcribed/recorded.

Individuals who should include statements:

- Injured parties
- Witnesses
- Other third parties

8.0 Incident Follow up

8.1 Disciplinary action must be taken if circumstance(s) warrant discipline.

8.2 A Follow-up Employee Counseling Memo must be completed by the SRM/SC detailing the necessary steps to prevent reoccurrence of the accident/incident/injury in the future; as well as, any retraining that will take place. A copy of this memo shall be included in the employee's employment file.

9.0 Modified Duty

9.1 May be provided for every employee returning to work from an occupational injury or illness where the employee's physical abilities are temporarily impaired. Employees on modified duty should be reasonably supervised. Every incident involving modified duty must be processed in the following manner:

9.1.1 The treating physician must define restrictions/special/necessary tasks and communicate this to the CM, who will then communicates the SRM and employee.

9.1.2 As initiated by the CM, the assigned supervisor should report weekly on the progress of the Modified Duty Employee. The CM is to provide this information regularly to the designated insurance carrier adjuster and directly to the treating physician prior to ALL follow-up medical visits.

9.1.3 As physical restrictions change from follow-up visits, the process re-starts.

9.1.4 As soon as possible, the CM must obtain "full release" statements and provide them to the designated insurance carrier adjuster immediately.

9.1.5 Modified Duty employees cannot return to full duty until such a release is provided by the treating physician.

9.1.6 All documentation from the treating physician must be faxed to the CM immediately.

9.1.7 The CM will supply an Offer of Modified Duty sent by certified mail return receipt in cases where an injured employee refuses to return to work.

10.0 Disciplinary Process for Safety Violations

"Asking me to overlook a simple safety violation would be like asking me to compromise my entire attitude toward the value of your life"

FSG has a disciplinary process for safety rule/policy violations. Discipline can take any of the following steps:

- Verbal warning (Reference **APX-003C Progressive Discipline Report**)
- Written warning (Reference **APX-003C Progressive Discipline Report**)
- Suspension (Reference **APX-003C Progressive Discipline Report**)
- Immediate Termination (Reference **APX-003C Progressive Discipline Report**)

Employees observed behaving in an unsafe manner shall be advised of the incorrect behavior, involved in identifying corrective measures, and given an opportunity to correct their behavior. If they do not make satisfactory changes within an allotted time frame, or if the behavior constitutes an Immediately Dangerous to Life & Health (IDLH) action, disciplinary procedures should be initiated.

Branch Managers, Supervisors, SRM/SC and the DRM are responsible for monitoring and ensuring that a safe work environment exists and that employees engage in safe work practices. Offenses should merit the application of some or all of the actions below.

Disciplinary Action for Safety and Vehicle Violations may take any of the following forms:

VERBAL WARNING
An immediate supervisor should meet with the employee to discuss unsafe behavior. The unsafe behavior should be specifically described and the desired behavior clearly articulated. The employee should be made aware that (continued) unsafe behavior will result in further disciplinary action, up to and including immediate termination. This conversation should be noted via the Progressive Discipline Report and included in the employee's personnel file.

WRITTEN WARNING
The supervisor must meet with the employee and fill out a Progressive Discipline Report containing detailed information about the violation. The employee and the supervisor must sign the form. If the employee refuses to sign the form, a witness should sign the form and indicate that the employee was aware that his/her job was in jeopardy as a result of the violation.

SUSPENSION
An employee may be suspended when he/she has performed or contributed to an unsafe behavior or if the behavior constitutes an Immediate Danger to Life and Health (IDLH) situation. This decision is made by the Branch Manager and the SRM.

A suspension should be no less than 1 full workday. Managers may suspend an employee without pay for up to 2 full weeks. A Progressive Discipline Form noting the suspension must be forwarded to the employee's personnel file.

IMMEDIATE TERMINATION
Employees may be immediately terminated if he/she has performed or aided in the performance of an IDLH situation, an unsafe behavior that causes bodily injury or damage to company or customer equipment, or creates a general hazard. The Branch Manager and the SRM must determine any safety related termination and forward this information to the employee's personnel file.

ALL MOVING VIOLATIONS RECEIVED WHILE OPERATING COMPANY VEHICLES MUST BE REPORTED TO THE BRANCH MANAGER AND SRM. SPECIFICALLY, DISCIPLINARY ACTION FOR VEHICLE SAFETY VIOLATIONS MAY TAKE ANY OF THE FOLLOWING FORMS:

FIRST TICKET OFFENSE
Can include a verbal warning, written warning or a suspension depending on the severity of the offense. **Employee must attend and pay for a company-sanctioned Driver Safety course within 30 days to be able to continue to drive a company vehicle.**

SECOND TICKET OFFENSE
If within a six month period, must include a written warning and may include a suspension depending on the offense severity. Employee could also forfeit driving privileges of FSG vehicles for a period of time. **Employee must attend and pay for a company-sanctioned Driver Safety Course within 30 days to be able to continue to drive a company vehicle.**

THIRD TICKET OFFENSE
If within a six month period, causes forfeiture of driving a company vehicle.

RECKLESS DRIVING
When called-in by the general public, can include a verbal warning, written warning or a suspension depending upon the severity of the offense.

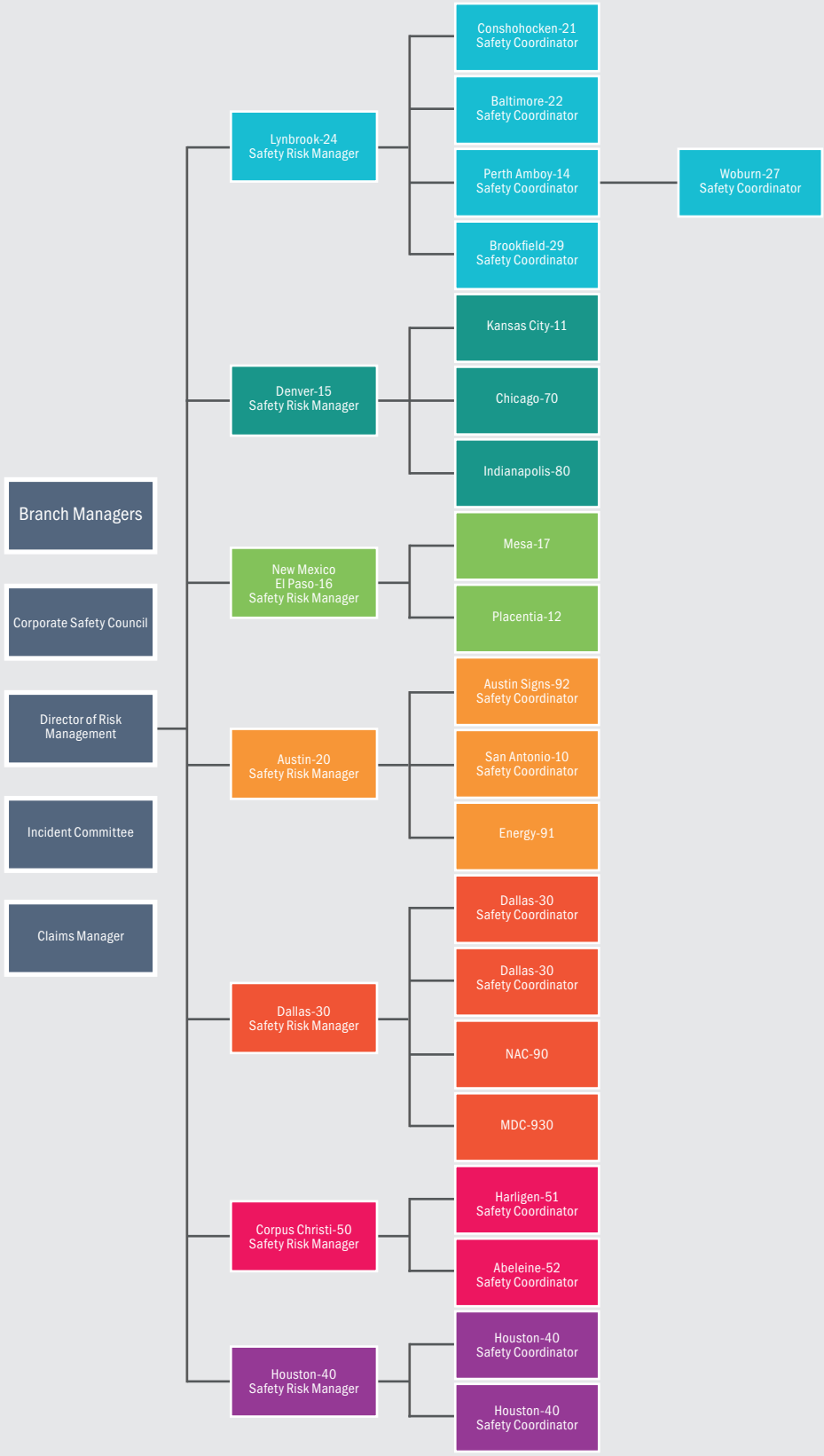
11.0 Job Hazard Analysis

- Must be completed before any task. (Reference **APX-003F JHA**)
- Must be completed per the procedures in the Safety Handbook.

References:

- APX-003C **Progressive DIscipline Report**
- APX-003F **Job Hazard Analysis**
- APX-019A **Training Matrix**
- SMS-004 **Incident Proceedure**

SAFETY ORGINIZATIONAL CHART



INCIDENT INVESTIGATION AND REPORTING PROCEDURE

1.0 Scope:

1.1 This procedure covers all employee incidents, accidents, injuries and near misses. It also covers all vehicle incidents, accidents and near misses.

2.0 Training Requirements:

2.1 All FSG employees must be trained on this procedure and when and how to report an incident or accident.

2.1.1 Initial training will be administered at the time of first assignment and will consist of classroom lecture (Reference **APX-004I Accident and Incident Training Power Point**) and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**).

2.1.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by your Safety Risk Manager or Safety Coordinator. **(**Reference **APX-019A Safety Training Matrix)**

3.0 Procedure:

3.1 **STEP 1:** All injuries and illnesses must be reported immediately to your Risk Manager. Get medical treatment for any injured employees or complete **APX- 004B Declination of Treatment**. Supervisor or Safety Risk Managers/ Coordinator should accompany the employee to receive medical treatment.

3.1.1 Post accident drug test is required.

3.2 **STEP 2:** The Safety Risk Manager/Safety Coordinator will notify the FSG Claims Manager of all near misses, injuries and vehicle accidents. The Safety Risk Manager/Safety Coordinator will complete **APX-004A First Report of Injury** for all work related injuries and vehicle incidents that result in injury(s) to FSG employees.

3.3 **STEP 3:** The Safety Risk Manager/Safety Coordinator or his or her designee will complete form **APX-004C Incident/Accident Investigation and Root Cause Analysis Report** within 24 hours of the incident and forward to the Claims Manager for review.

3.4 **Step 4:** Safety Risk Manager/Safety Coordinator will complete **APX -004C Incident/Accident Investigation and Root Cause Analysis Report** form with the appropriate personnel. Root Cause Analysis will be reviewed with the Incident Committee weekly every Friday to make further recommendations to prevent reoccurrence.

3.5 **STEP 5:** Complete **APX-004D Witness Report** form with employees who witnessed the event and/or all parties that witnessed the event. If there were no witnesses, have the individual involved fill out a witness report for use later if a conflict of events arises.

3.6 **STEP 6:** Take photos of the accident area and any deficiencies; as well as, any corrective measure taken to correct deficiencies.

3.7 **STEP 7:** Provide a copy of the JHA covering any work related to the incident or accident and send it in with the additional forms from **Steps 1, 2, 3, 4, 5** and **7** in this procedure to your Safety Risk Manager/SC and the Claims Manager.

3.8 **STEP 8:** For vehicle accidents the Claims Manager will pull the GPS Trackit Report. The vehicle incident report **APX-004C Vehicle Incident Report** must be completed.

3.9 **STEP 9:** Claims Manager will add incident to incident log and will maintain all record(s) of the incident.

3.10 **STEP 10:** The Incident Committee will review the prior week's incident every Friday.

4.0 Re-Training Injury:

4.1 **STEP 1:** Provide training specific to type/cause of the injury and document using a Pronto sign in sheet.

4.2 **STEP 2:** Safety Risk Managers or Safety Coordinator will complete an Injury/Accident Follow up Memo and review with the employee.

5.0 Retraining Vehicle Accident:

5.1 **STEP 1:** Provide the appropriate Travelers Driver Safety Course and document using a Pronto Sign-In sheet.

5.2 **STEP 2:** Help facilitate the appropriate State Defensive Driving course for employee when the employee was at fault.

5.3 **Step 3:** Provide a vehicle ride along with documentation. **Pronto Form T22 Driver Assessment**

5.4 **STEP 4:** Complete a Vehicle Accident Follow-Up Memo and review with the employee.

6.0 Near Miss Procedure:

6.1 **STEP 1:** All near miss incidents must be reported immediately to your Safety Risk Manager or the Safety Coordinator.

6.2 **STEP 2:** The Safety Risk Manager/Safety Coordinator will communicate near miss incidents with the Claims Manager as well as completing a Near Miss Report for any near miss injuries and near miss vehicle incidents.

6.3 **STEP 3:** Complete **APX-004F Near Miss Report** within 24 hours of the incident and forward to Safety Risk Manager/Safety Coordinator and Claims Manager.

6.4 **STEP 4:** Complete near miss follow up memo and review with employee.

References:

- APX-004A **First Report of Injury**
- APX-004B **Declination of Treatment**
- APX-004C **Incident/Accident Investigation and Root Cause Analysis Report**
- APX-004D **Witness Report**
- APX-004E **Driver Evaluation (Pronto form T22 Driver Assessment)**
- APX-004F **Near Miss Report**
- T1 **Accident Investigation Training Power Point**
- T22 **Driver Assessment**

ENERGIZED SAFE WORK PROCEDURE

1.0 Energized Work Scope:

1.1 This procedure covers electrical safety-related work procedures for all FSG employees who work on or near exposed energized electrical conductors, circuits, circuit parts, equipment and exposed energized components at FSG. FSG has a strict "***no live work***" policy. This policy is designed to provide a safe working environment for everyone on the jobsite. The policy conforms to OSHA and NFPA 70E standards. *"NFPA 70E: 130.2 Live parts to which an employee might be exposed to shall be put into an electrically safe work condition before an employee performs work within the restricted approach boundary or a arc flash hazard exist , **unless the employer can demonstrate that de-energizing introduces additional or increased hazards** or is infeasible due to equipment design or operational limitations".*

2.0 Training Requirements:

2.1 All FSG Journeymen or equivalent must be trained and classified as Qualified and Authorized Persons before they are allowed to perform live work, shutdown and testing/troubleshooting activities.

2.1.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.1.1.1 **LEVEL I** Basic testing of 120V devices and equipment operation, no open circuitry or exposed energized parts (**T-9 ESWP Training**). This will require the use of voltage rated gloves and leather protectors, long sleeve 100% cotton shirts, safety glasses and Class E hard hat. (Reference **APX-005E Energized PPE Matrix**)

2.1.1.2 **LEVEL II** authorization for testing and LO/TO application on circuits and equipment up to 240v (**T-9 ESWP Training**). Category 2 PPE will be issued to all personnel at this level along with a LO/TO kit. (Reference **APX-005E Energized PPE Matrix**)

2.1.1.3 **LEVEL III** authorization for testing and LO/TO application on circuits and equipment up to 480V (**T-13 ESWP Training**). Introduction to energized work as a second person on circuits and equipment that does not require use of 40 Cal PPE, including introduction and preparation of Energized Work Permits, JHA and MOP documentation. This authorization will require use of Category 2 PPE per NFPA 70E. (Reference **APX-005E Energized PPE Matrix**)

2.1.1.4 **LEVEL IV** Authorization for all testing, LO/TO applications, energized work and document preparation (**T-13 ESWP Training**). This will require both Category 2 PPE and Category 4 PPE as required per NFPA 70 E. (Reference **APX-005E Energized PPE Matrix**)

2.1.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

2.2 An unqualified employee can only verify for absence of voltage if the circuit has been previously verified for absences of voltage by a Qualified and Authorized Person.

3.0 Energized Work Procedure:

3.1 **STEP 1:** Once justification for energized work has been established consistent with OSHA regulations and NFPA 70E 130.2(A) which require demonstrating that the task to be performed is infeasible in a de-energized state due to equipment design or operation, this procedure must be followed.

3.1.1 If **only** completing a shutdown skip to section 4.0 Shutdown Procedure and follow procedure.

3.1.2 If **only** completing testing and trouble shooting please skip to section 5.0 Testing and Troubleshooting and follow procedure.

3.2 **STEP 2:** Complete an Energized Work JHA (Reference **APX-005A Energized Work JHA**) and an Energized Electrical Permit (Reference **APX-005B Energized Electrical Permit**) for all energized work tasks.

3.3 **STEP 3:** Complete Shutdown Method of Procedure (Reference **APX-005C MOP**) for the energized work to be completed.

3.4 **STEP 4:** Complete a One line Diagram (Reference **APX-005D One Line Diagram**) showing the conductors/circuit(s) to be worked on. One-line can be in any format such as a sketch, print etc.

3.5 **STEP 5:** Construction projects must submit Energized Work JHA, Energized Work Permit, Energized Work MOP, and One Line diagram to the Safety Risk Manager or his or her designee for review one week before energized work for approval. Service jobs should submit Energized Work Permit as soon as possible to the safety department for review.

3.6 **STEP 6:** Once approval has been granted by the safety department, the trained and authorized electrician requesting to complete live work shall commence work.

4.0 Shutdown Procedure:

4.1 **STEP 1:** Once justification for a shutdown has been established (NFPA 70E 130.2) by demonstrating that the task to be performed is feasible in a de-energized state due to equipment design or operation, this shutdown procedure shall be followed.

4.2 **STEP 2:** Complete a JHA for all shutdown tasks. (i.e. task lighting, ladder use etc.)

4.3 **STEP 3:** Complete a Shutdown Method of Procedure (Reference **APX-005C MOP**) for the energized work to be completed.

4.4 **STEP 4:** Complete a One line Diagram showing the conductors/circuit(s) to be worked on and systems to be isolated. One Line Diagram can be in any format such as a sketch, print etc.

4.5 **STEP 5:** Construction projects must Submit JHA, Shutdown MOP and One Line Diagram to the safety department for review one week before shutdown for approval. Service jobs should submit shutdowns as soon as possible.

4.6 **STEP 6:** Once approval has been granted by the Safety Risk Manager, the trained and authorized electrician shall commence work isolating all equipment identified in the JHA and Shutdown MOP in accordance with the procedures in the LO/TO Procedure (Reference **SMS- 007 Lockout/Tagout Procedure**). Follow the Energized Safety Matrix for PPE Requirements when verifying equipment is in a de-energized state.

NOTE: Verify correct operation of all testing equipment using the Live, Dead, Live method and documenting correct operation on the JHA.

5.0 Testing and Troubleshooting:

5.1 **STEP 1:** Testing and troubleshooting can only be completed by a Qualified and Authorized Person. **Testing and trouble shooting is not considered live work under OSHA and NFPA requirements.**

5.2 **STEP 2:** Testing and trouble shooting should only be performed using a Category III or IV meter.

5.3 **STEP 3:** Qualified and Authorized Person(s) must determine the appropriate Arc Flash Hazard PPE category and boundary utilizing data found in table 130.7(c) (15)(A)(b) of the NFPA 70E Manual if the parameters are known or the calculation method if parameters are unknown but not both. Testing equipment can include a Category III or IV voltage meter, Wiggy or a Proximity Tester. All testing equipment must be approved by the Safety Department.

NOTE: You must be trained and authorized to use any testing equipment.

5.0 Testing and Troubleshooting: (continued)

5.4 **STEP 4:** Verify correct operation of all testing equipment using the Live, Dead, Live method and documenting correct operation on the JHA.

5.5 **STEP 5:** Proceed with testing and trouble shooting of equipment/systems utilizing **APX-005E Energized Safety Matrix** for PPE Requirements when testing and troubleshooting.

6.0 Commissioning Procedures for Temporary Power, Switchgear etc.

6.1 **STEP 1:** Once justification for Commissioning the Switch Gear has been established complete form APX-005I Commission Checklist.

6.2 **STEP 2:** Complete a JHA for all Commissioning tasks. (i.e. task lighting, ladder use etc.)

6.3 **STEP 3:** Once approval has been granted, the Trained and Authorized electrician shall commence work commissioning all equipment identified in the JHA and removing any locks and tags in accordance with the procedures in the LO/TO Procedure (**SMS- 007 LO/TO Proceedure**). Follow the Energized Safety Matrix for PPE Requirements when testing equipment.

NOTE: Verify correct operation of all testing equipment using the Live, Dead, Live method and documenting correct operation on the JHA.

7.0 Commissioning Procedures for Branch Circuits:

7.1 **STEP 1:** Once justification for commissioning the branch circuits has been established complete form **APX-005H Branch Circuits Checklist**.

7.2 **STEP 2:** Complete a JHA for all branch circuit commissioning tasks. (i.e. task lighting, ladder use etc.)

7.3 **STEP 3:** Once approval has been granted, the Trained and Authorized electrician shall commence work commissioning all equipment identified in the JHA and removing any locks and tags in accordance with the procedures in the LO/TO Procedure (Reference **SMS- 007 LO/TO Procedure**). Follow the Energized Safety Matrix for PPE Requirements when testing equipment.

NOTE: Verify correct operation of all testing equipment using the Live, Dead, Live method and documenting correct operation on the JHA.

References:

- APX-005A **Energized Work JHA**
- APX-005B **Energized Electrical Permit**
- APX-005C **Energized Work MOP**
- APX-005D **Energized Work One Line Diagram**
- APX-005E **Energized Work Safety Matrix**
- APX-005G **Pronto Electrical Field Knowledge Assessment**
- APX-005H **Branch Circuit Checklist**
- APX-005I **Commission Checklist**
- APX-019A **Safety Training Matrix**
- SMS-007 **Lockout/Tagout Procedure**
- APX-019A **Safety Training Matrix**

TEMPORARY ELECTRICAL PROCEDURE

1.0 Scope

This procedure applies to temporary electrical power and lighting wiring methods consistent with NEC 590 Temporary and OSHA Sub part K Electrical Installations.

2.0 Training

The Safety Risk Manager and/or Safety Coordinator shall provide Temporary Electrical Procedure training to all FSG employees:

2.1 **STEP 1**: All FSG Journeymen (or equivalent) must be trained and classified as a Qualified and Authorized Person before they are allowed to maintain Temporary Electrical Installations.

2.1.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.1.1.1 **LEVEL I BASIC TESTING** of 120V devices and equipment operation, no open circuitry or exposed energized parts. This will require the use of voltage-rated gloves and leather protectors, long sleeve 100% cotton shirts, safety glasses and Class E hard hat. (Reference **T-9 ESWP Training**)

2.1.1.2 **LEVEL II AUTHORIZATION** for testing and LO/TO application on circuits and equipment up to 240v. Category 2 PPE will be issued to all personnel at this level along with a LO/TO kit. (Reference **T-9 ESWP Training**)

2.1.1.3 **LEVEL III AUTHORIZATION** for testing and LO/TO application on circuits and equipment up to 480V. Introduction to energized work as a second person on circuits and equipment that does not require use of 40 Cal PPE, including introduction and preparation of Energized Work Permits, JHA and MOP documentation. This authorization will require use of Category 2 PPE per NFPA 70E. (Reference **T-13 ESWP Training**)

2.1.1.4. **LEVEL IV AUTHORIZATION** for all testing, LOTO applications, energized work and document preparation. This will require both Category 2 PPE and level 4 PPE as required per NFPA 70 E. (Reference **T-13 ESWP Training**)

2.1.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019 A Safety Training Matrix**).

2.2 **STEP 2:** An unqualified employee can only verify for absence of voltage if the circuit has been previously verified for absences of voltage by a Qualified and Authorized Person.

3.0 Procedure

3.1 **STEP 1:** Once temporary service is established, determine location of service disconnect and temporary panel.

3.2 **STEP 2:** Make a plan for the installation of temporary lighting taking into consideration that you have at least 5 foot candles of illumination and all access and egress locations are covered. Weekly temporary log must be documented and completed. (Reference **APX-006A Temporary Electrical Inspection Report**).

3.2.1 GFCI trip settings must be tested to determine trip setting and recorded on **APX-006A Temporary Electrical Inspection Report**.

3.2.2 GFCI should be checked to manufacture specs to verify that indicator light does not indicate to replace.

3.2.3 Stringer/Romex must be supported by a non-conductive material, i.e.; jet line.

3.2.4 Stringer/Romex splices of 4 or more connections must be wire nutted and boxed.

3.2.5 Stringer/Romex of 3 or less connections must have a wire nut and be taped using 5 wraps of Scotch 33+ Electrical tape.

3.2.6 All splices when a change is made from a raceway to a cable/cord assembly must be in an enclosed junction box.

3.2.7 All lamps must be guarded and in place with no open sockets.

3.2.8 All temporary Stringers/Romex coming up from a panel must be protected by PVC, Smurf tube, etc. when 8 ft. or less from the finished floor.

3.2.9 All temporary Stringers/Romex must be supported when 8 ft. or less when coming from the source (panel). SCR and SEU cable must be protected and not laid on the floor.

3.2.10 Any temporary must be removed immediately on completion of intended installation.

3.3 **STEP 3:** Temporary wiring: Panels and spider boxes must be visually inspected daily and documented weekly using the Temp Inspection Log.

3.3.1 Panels and temporary service must be suitable for the environment, i.e.; wet locations.

3.3.2 All receptacles must be of the GFCI type

3.3.3 GFCI receptacles must be identified

3.3.4 Any open KO's must be sealed.

3.3.5 All panels and electrical rooms must be locked and accessible to only authorized employees.

3.3.6 All temporary panels must have an Arc Hazard Label.

References:

- APX-006A **Temporary Electrical Safety Report**
- APX-019A **Safety Training Matrix**
- T-9 **ESWP Training**

LOCKOUT/TAGOUT PROCEDURE

1.0 Scope:

This procedure covers Lockout/Tagout (LO/TO) of electrical equipment and systems.

2.0 Training Requirements:

2.1 The Safety Risk Manager shall administer Authorized / Competent Person training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.

2.2 Each affected employee shall be instructed in the purpose and use of the Energy Control Procedure.

2.3 All other employees whose work operations are or may be in an area where Energy Control Procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked and tagged out.

2.4 All FSG Journeymen or Equivalent must be trained and classified as Qualified and Authorized Persons before they are allowed to perform shutdown and testing/troubleshooting activities related to Lockout/Tagout.

2.4.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.4.1.1 **LEVEL I BASIC TESTING** of 120V devices and equipment operation, no open circuitry or exposed energized parts. This will require the use of voltage-rated gloves and leather protectors, long sleeve 100% cotton shirts, safety glasses and Class E hard hat. (Reference **T-9 ESWP Training**)

2.4.1.2 **LEVEL II AUTHORIZATION** for testing and LO/TO application on circuits and equipment up to 240v. Category 2 PPE will be issued to all personnel at this level along with a LO/TO kit. (Reference **T-9 ESWP Training**)

2.4.1.3 **LEVEL III AUTHORIZATION** for testing and LO/TO application on circuits and equipment up to 480V. Introduction to energized work as a second person on circuits and equipment that does not require use of 40 Cal PPE, including introduction and preparation of Energized Work Permits, JHA and MOP documentation. This authorization will require use of Category 2 PPE per NFPA 70E. (Reference **T-13 ESWP Training**)

2.4.1.4 **LEVEL IV AUTHORIZATION** for all testing, LO/TO applications, energized work and document preparation. This will require both Category 2 PPE and level 4 PPE as required per NFPA 70 E. (T-13 ESWP Training)

2.4.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

2.5 An unqualified employee can only verify for absence of voltage if the circuit has been previously verified for absences of voltage by a Qualified and Authorized Person.

3.0 LO/TO Procedure:

3.1 **STEP 1:** Prepare for Shutdown-LO/TO

3.1.1 For a complex LO/TO procedure, complete an Energized Work Survey(s), Shutdown Permit(s), MOP(s) and One Line Diagram(s), **APX-007A LO/TO** log(s) and submit as necessary to the safety department, and project management (including GC and Owner if necessary) for review. (Reference **SMS-005 Energized Work Procedure**).

3.1.2 Gather tools and LO/TO equipment needed for shutdown of equipment/circuits.

3.1.3 Review **SMS-005 Energized Work Procedure**.

3.1.4 Update JHA and review with the crew as needed.

3.2 **STEP 2:** Notify Affected Personnel

3.2.1 Notify any unqualified personnel that LO/TO activities may affect.

3.2.2 Notify GC/Owner personnel that LO/TO activities may affect.

3.2.3 Review with unqualified personnel any hazards that LO/TO activities may present.

3.3 **Step 3:** Identify All Energy Sources

3.3.1 For simple LO/TO (only one energy source) identify the circuit/equipment to be de-energized.

3.3.2 For complex LO/TO (multiple energy sources) you may need to look at other possible energy sources such as backup generator, UPS battery back-up, pneumatic, hydraulic, gravity, etc.

3.4 **STEP 4:** Apply LO/TO Device(s)

3.4.1 Depending on the item to be locked out there are many different devices that can be deployed from a Lock and Key for a single lockout, to Lockout Cables, Lockout Hasps and Lock Boxes for multiple energy source lockouts.

Note: Not landing all conductors on breakers is an acceptable method to use for energy isolation as long as the panel is de-energized later when you go to land the conductors on the breakers.

3.4.2 Each qualified individual that will be working on the circuit/equipment being locked out **must apply their own individual lock and tag** on the circuit/equipment being serviced, or place one lock and tag on the circuit and take the key and place the key in a lock box that all employees will then attach their locks to.

3.5 **STEP 5:** Verify Absence of Energy

3.5.1 Once all energy sources have been isolated by lockout/tagout, employees must verify that circuits/ equipment to be serviced are de-energized.

3.5.2 You must test for absence of voltage by using test equipment to verify equipment to be serviced is de-energized.

3.5.3 Test all test equipment on known source of energy and test using the Live, Dead, Live method. Testing equipment can include a Category III or IV voltage meter, Wiggy or a Proximity Tester and must be approved by the safety department.

Note: You must be trained and authorized to use testing equipment.

3.6 **STEP 6:** LO/TO Complete

3.6.1 Proceed with servicing, adjusting etc.

Note: If work continues for multiple days make sure to follow Step 4 every morning before work begins to verify equipment is still de-energized.

4.0 RE-ENERGIZE:

4.01 **STEP 1**: Prepare for re-energization and removal of LO/TO

Complete any energized work permits, update **APX-007A LO/TO** log(s) and submit as necessary to the safety department, and project management (including GC and Owner if necessary) for review.

4.0.2 Gather tools and equipment used during shutdown of equipment/circuits.

4.0.3 Visually inspect the area to make sure everything is safe to re-energize.

4.1 **STEP 2**: Notify Affected Personnel

4.1.2 Notify any unqualified personnel that re-energization activities may affect.

4.1.3 Notify GC and/or Owner personnel that re-energization activities may affect.

4.1.4 Review with unqualified personnel any hazards that re-energization activities may present.

4.2 **STEP 3:** Identify All energy sources Locked and Tagged out

4.2.2 For simple LO/TO (only one energy source) identify the circuit/equipment to be energized.

4.2.3 For complex LO/TO (multiple energy sources) you may need to look at other energy sources such as backup generator, UPS battery back-up, pneumatic, hydraulic, gravity, etc. that have been locked out and need to be re-energized.

4.3 **STEP 4:** Remove LO/TO Device(s) and re-energize

4.3.2 Remove LO/TO devices and proceed to re-energize equipment/circuits.

4.3.3 For complex LO/TO make sure to update **APX-007A LO/TO** log as necessary.

4.3.4 If testing and trouble-shooting needs to take place, make sure that you complete any energized work permits and submit to the safety department and project management (including GC and Owner if necessary) for review. Test all test equipment on known source of energy and test using the Live, Dead, Live method and record on testing trouble shooting log.

4.4 **STEP 5:** LO/TO Re-Energization Complete

References:

- APX-007A **LO/TO Log**
- SMS-005 **Energized Work Procedure**
- APX-019A **Safety Training Matrix**
- T-9 **ESWP Training**
- T-13 **ESWP Training**

Single Lock and Tag on Each Breaker

Cable Lock Out passed through multiple breakers with one lock

Multi Lock Hasp

Lock Box for multiple employees working on equipment/circuits under Lock Out/Tag Out

HOUSEKEEPING AND SANITATION PROCEDURE

1.0 Scope:

This procedure covers all Housekeeping and Sanitation activities at FSG.

2.0 Training Requirements:

2.1 The Safety Risk Manager and/or Safety Coordinator shall ensure all FSG employees have been trained on this Housekeeping and Sanitation procedure.

2.1.1 Initial training will be administered at the time of first assignment and consist of classroom lecture.

3.0 Procedure:

3.1 All personnel are to keep their work sites, business-related vehicles, shops, warehouses, material lay-down areas, tools, offices and parking lot areas clean, orderly and well maintained.

3.2 Keep walkways, stairways and roadways clear for the safe movement of other personnel, material and/or equipment.

3.3 Adequate trash receptacles should be made available. Scrap materials are to be stacked or stored for disposal or recycling in a neat and orderly manner that does not interfere with anyone's work processes.

3.4 Electrical Cords, hoses, ropes, conduit, ladders and other similar hazards should not be placed in walkways, stairways and work areas in such a manner as to create tripping hazards.

3.5 Inspections of overall housekeeping efforts should be expected.

3.6 Emergency exit doors/doorways and evacuation routes are to be kept clear at all times. These exit doors are to be kept unlocked from the inside.

3.7 Arrangements for water containers/drinking cups, and other sanitation control processes should be provided as required.

3.8 Water containers should be cleaned periodically with an antiseptic cleaning solution.

3.9 The "common drinking cup" is prohibited.

3.10 Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups should be provided.

3.11 Toilet facilities of clients should not be utilized without authorization.

HAZARD COMMUNICATION PROCEDURE

1.0 Scope:

1.1 The purpose of this Haz-Com procedure is to ensure that the hazards of all chemicals used at FSG are transmitted to employees. This procedure is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The transmittal of information to employees will be accomplished by means of this hazard communication program, which includes provisions for container labeling and other forms of warning, safety data sheets and employee training.

2.0 Training Requirements:

2.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**) Employees must receive the following information and training:

2.1.1 The requirements and details of this written Hazard Communication Procedure;

2.1.2 Location of operations in their work area where hazardous chemicals are present;

2.1.3 The location and availability of the written Hazard Communication Procedure and SDS's;

2.1.4 Methods and observations that must be used to detect the presence or release of a hazardous chemical in the work area;

2.1.5 Physical and health hazards of the chemicals in their work area;

2.1.6 Measures taken to protect them from these hazards including any specific control procedures implemented to protect from exposure.

2.1.7 As new chemicals are introduced to the work area, repeat the training above.

2.2 Retraining will take place every 5 years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager and/or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Procedure:

3.1 All personnel must be trained to understand the Hazard Communication or "Right to Understand" procedure. "Right to Understand" refers to a program requiring employers to inform employees of known chemical hazards found in the work place. Employees have the right to know about the potentially hazardous products used in the work place.

3.1.1 The DRM and SRM's should conduct an evaluation of this written Hazard Communication Procedure at least annually.

3.1.2 The most current Safety Data Sheets available should be utilized.

3.1.3 FSG will rely on the evaluation performed by the chemical manufacturers who originates the SDS for accuracy.

3.1.4 A master set of SDS documents (**APX- 009A Master List of SDS Documents**) should be maintained at the main Branch office. Each Branch should post a copy at their location. Copies of the chemical inventory list are also available on the FSG Intranet.

3.1.5 SDS's for a specific project should be established, maintained and made available to employees involved with the project. Such compilations can be unique to the project, e.g. sets for Service Technicians on vehicles,

tool rooms, shop areas, long-term service site, etc. The Competent Person is responsible for providing this Haz-Com procedure to job-site employees and making employees on site aware of any new SDS's. SDS's can be in either a hard copy or digital form as long as they are readily accessible.

3.1.6 Each container of hazardous chemicals received from the chemical manufacturer, importer or distributor will be labeled with the following information:

3.1.6.1 Product identifier

3.1.6.2 Signal word

3.1.6.3 Hazard statement(s)

3.1.6.4 Pictogram(s)

3.1.6.5 Precautionary statement(s)

3.1.6.6 Name, address and telephone number of the chemical manufacturer, importer or other responsible party

3.1.7 FSG will use the GHS labeling system for secondary containers which hazardous chemicals are transferred from. Containers that are intended for the immediate use of the employee who performs the transfer do not require a label. If the portable container will be used by more than one employee or used over the course of more than one shift, the container must be labeled. When a chemical is transferred from the original container to a portable or secondary container, the container will be labeled, tagged or marked with a GHS label containing the information as outlined in 3.1.6.1 – 3.1.6.6 above.

3.1.8 SDS(s) will be obtained and maintained for each hazardous chemical in the workplace. SDSs for each hazardous chemical will be readily accessible during work to employees when they are in their work areas.

3.1.9 If problems arise in obtaining an SDS from the chemical manufacturer, importer or distributor, a certified letter with return receipt will be made to request an SDS and a written record will be maintained of all efforts to obtain SDS(s).

3.1.10 Before any non-routine task is performed, employees shall be advised and/or they must contact their supervisor for special precautions to follow and the supervisor shall inform any other personnel who could be exposed.

3.1.11 It will be the responsibility of the Foreman to provide other personnel or outside contractors with the following information as follows:

3.1.11.1 Hazardous chemicals to which they may be exposed to while in the workplace.

3.1.11.2 Measures to lessen the possibility of exposure; location of SDS for all hazardous chemicals.

3.1.11.3 Procedures to follow if they are exposed.

3.2 The Foreman will also be responsible for contacting each contractor before work is started to gather and disseminate any information concerning chemical hazards the subcontractor is bringing into the workplace, and vice versa.

References:

- APX- 009A **Master List of SDS Documents**
- APX- 019A **Safety Training Matrix**

LADDER PROCEDURES

1.0 Scope:

This procedure covers the safe use of ladders by employees at FSG.

2.0 Training Requirements:

2.1 Each employee will receive class room lecture and field knowledge demonstration during orientation (**APX-019A Safety Training Matrix**) on this procedure for the expressed purpose of ensuring awareness of the hazards associated with ladders.

2.2 Trained and Authorized employees must receive training utilizing ladders, either separately or in conjunction with Fall Protection training. The nature of ladder hazards in the work site; as applicable, the correct procedures for construction (job-made ladders), use, placement and care in handling all ladder types and styles; the maximum intended load-carrying capacities of all ladder types and styles.

2.3 Field proficiency demonstration must be conducted annually utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager and / or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**)

3.0 Ladder Procedure:

3.1 **STEP 1:** Ladders shall be inspected utilizing the daily JHA before each use for visible defects, and after any occurrence that could affect their safe use. You must also consider the hazards of ladder use/activities on your daily JHA. Damaged ladders shall be tagged with "**Danger-Do Not Use"** and taken out of service, removed from site and sent to shop to be destroyed or repaired per manufacture specifications. Ladders shall be maintained free of oil, grease, ice, snow, mud or other slippery substance from the rungs/steps.

3.2 **STEP 2:** Ladders must be used only on stable and level surfaces unless secured to prevent accidental displacement.

3.2.1 Ladders are to be chosen on the basis of the task needs (height, rating, etc.).

3.2.2 The area around the top and bottom of ladders shall be kept clear.

3.2.3 Portable ladders (straight ladder) must extend at least 36" above upper landing surface, and shall be secured at the top.

3.2.4 Extension ladders should be set up at 1:4 angle (base to height ratio) maximum working height 4th rung down from top.

3.2.5 Extension ladders must extend 3' above landing and tied off.

3.2.6 Extension ladders or step ladders must be equipped with safety shoes.

3.3 **STEP 3**: Performing work from the ladder.

3.3.1 The top of ladder shall not be used to store tools or materials.

3.3.2 Ladders shall not be moved, shifted, or extended while occupied.

3.3.3 Cross-bracing on the rear section of step ladders shall not be used for climbing, unless the ladders are designed with steps for climbing on the front and rear sections.

3.3.4 Never use/stand on the top two steps of a stepladder. Obtain a larger ladder if more height is necessary.

3.3.5 Always use the 3-point rule when climbing up or down, that is, at least two hands and one foot, or two feet and one hand are to be in contact with the ladder at all times

3.3.6 Keep ladders at least ten (10) feet away from power lines.

3.3.7 Carry tools/equipment/materials in a tool belt or (once at your work height on the ladder) pulled up with a rope. The reverse is required before descending the ladder.

3.3.8 Step ladders must be fully opened when in use.

3.3.9 All safety labels shall be replaced if they are damaged or not legible.

References:

- APX-019A **Safety Training Matrix**

SCAFFOLDING PROCEDURES

1.0 Scope:

This procedure covers safe use of Scaffolds.

2.0 Training Requirements:

2.1 Initial Awareness training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**).

2.2 Initial Competent Person training will be administered by outside source before time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**).

2.3 Awareness retraining will take place every three years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

2.4 Competent Person retraining will take place every three years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Procedures:

3.1 Personnel required to work from/on scaffolding must be trained and designated as Scaffold Users.

3.2 Scaffolds must be erected, used, modified, and dismantled in accordance with the requirements of this standard and those of regulatory agencies. These standards also apply to contracted parties responsible for these activities.

3.3 When scaffold assemblies are no longer required they must be dismantled and safely stored/secured.

3.4 The use of scaffold assemblies constructed by FSG is reserved for the sole use of FSG employees unless otherwise specified by the SRM or designee or provided as a service as part of a contractual agreement.

3.5 Only competent persons designated as Scaffold Builders by the SRM are authorized to construct, modify, and dismantle scaffolds.

3.6 Only persons who are trained and designated as Scaffold Users are authorized to enter onto scaffold assemblies, except for stand-alone scaffold stairways.

3.7 Personnel who are involved with the erecting, modifying and/or dismantling of scaffolding must be trained and designated as Scaffold Builders.

3.8 After the scaffolding has been completed, a competent person trained for inspecting scaffolding must verify the condition of the assembly.

3.9 Persons working inside the confines of a completed scaffold are not required to wear fall protection equipment unless otherwise specified.

3.10 Daily inspections of scaffolding must occur BEFORE use. Only competent persons trained and authorized for this activity are allowed to perform these inspections.

3.11 Scaffolding inspection tags will be used to indicate the current condition of the scaffolding. The color system will be:

3.12 Green tags indicate that a scaffold is complete and ready for use

3.13 Yellow tags indicate that a scaffold is not complete.

3.14 Red tags indicate that a scaffold is not safe to use.

3.15 Scaffold Users are not to use scaffolds that have a yellow or red tag.

3.16 Scaffold Users are not to exceed the maximum intended load or rated capacity (whichever is less) of any scaffold. This includes the combined weight of personnel, tools, equipment, materials, etc. present on the applicable scaffolding at any one time.

3.17 No personnel are to be permitted to work on scaffolding when snow, ice or other slippery materials are present on the scaffolding. Only personnel designated for the removal of such materials are allowed to be on it. When the recurrence of such materials may become present again during a work period, your supervisor may require slip-resistant footwear and/or other precautions.

References:

- APX-019A **Safety Training Matrix**
- **Applicable Manufacturer Manuals**

CONFINED SPACE PROCEDURES

1.0 Scope:

This procedure covers confined space entry. A confined space is a space that Is large enough and so configured that an employee can bodily enter it; has limited or restricted means for entry and exit; and Is not designed for continuous employee occupancy.

2.0 Training Requirements:

2.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.1.1 **Confined Space Entry Supervisor** must be a Qualified and Competent person through training experience and or education in confined space entry requirements; as well as, be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

2.1.2 **Confined Space Authorized Entrant** must be CPR/First Aid trained and a competent person knowledgeable in the confined space entry requirements and also be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

2.1.3 **Confined Space Attendant** must be a competent person knowledgeable in the confined space entry requirements, trained in CPR/First Aid and be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

2.2 Retraining will take place every 3 years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Confined Space Determination:

3.1 **STEP 1:** The Safety Risk Manager and Confined Space Supervisor should inform affected employees of the location of each confined space.

3.2 **STEP 2:** The Safety Risk Manager and Confined Space Supervisor will conduct initial Confined Space Determination utilizing Form **APX-012A Confined Space Determination** and notify employees of the hazards of each space; i.e.; Permit or Non Permit Confined Space.

3.2.1 All Permit Required Confined Space must be posted with a Danger Sign.

3.2.2 Emergency Rescue shall be determined before any Permit/Non-Permit entry; i.e.; self rescue, attendant rescue, fire department rescue or outside rescue contractor.

Note: Rescue must be immediate as defined by OSHA to be 3 to 4 minutes.

4.0 Permit Required Confined Space

4.1 **STEP 1**: Before entry into a Permit Required Confined Space, the space must be inspected for hazardous atmosphere, physical hazards and confined space rescue options. This information must be documented on Form **APX-012A Confined Space Determination Form**.

4.1.1 All Confined Space Permits must be saved annually and reviewed by DRM and SRM.

4.2 **STEP 2:** Once Form **APX-012A Confined Space Determination Form** and **APX-012B Confined Space Permit** have been completely filled out, the Entry Supervisor must authorize entry.

4.2.1 SDS of chemicals that are taken into confined space

4.2.2 Continuous monitoring with a calibrated 4 gas meter

4.2.3 A means of rescue must be determined for all Permit-Required Confined Space entries.

4.2.4 Once the confined space cover is removed, a perimeter, i.e.; guardrail, plastic fencing must surround the area.

4.2.5 Continuous forced air ventilation must be used when entering a Permit-Required Confined Space.

5.0 Non Permit Required

5.1 **STEP 1:** Before entry into a Non-Permit Required Confined Space, the space must be inspected for any changes to hazardous atmosphere, physical hazards or confined space rescue options. This information must be documented on Form **APX-012C Non Permit Confined Space**.

5.2 **STEP 2:** Once Form **APX-012A Confined Space Determination Form** and **APX- 012C Non Permit Confined Space** has been completely filled out, Entry Supervisor must authorize entry.

5.2.1 Tripod and lanyard must be used for all Non Permit-Required Confined Space entries.

5.2.2 Once the confined space cover is removed, a perimeter, i.e.; guardrail, plastic fencing must surround the area.

References:

- APX-012A **Confined Space Determination Form**
- APX 012B **Confined Space Permit**
- APX-012C **Non Permit Confined Space**
- APX-019A **Safety Training Matrix**

EXCAVATION AND TRENCHING PROCEDURE

1.0 Scope:

This procedure covers excavation and trenching work. An excavation is any machine-made cut, cavity, trench or depression in an earth surface formed by earth removal.

2.0 Training Requirements:

2.1 Excavation and Trenching supervisor must be a competent person in the requirements of excavation and trenching and also be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

2.1.1 Training will be conducted before time of first assignment of supervising others in trenching and excavation work.

2.1.2 Training will be conducted by an outside training provider and will consist of classroom and field demonstration.

2.1.3 Retraining will take place every five years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

2.2 Affected employees will receive training during orientation on this procedure and the hazards associated with excavation and trenching. They will also receive site-specific training as it relates to the excavation or trench they will be working in.

3.0 Procedure:

3.1 **STEP 1:** Before work commences the Competent Person must determine the type of soil the work will be conducted in (If in doubt classify as Type C). The Competent Person must also make arraignments to have all utilities located and identified. Use **APX-013A Trenching and Excavation Checklist**.

3.1.1 Benching only allowed in Type ”A” & “B” soils.

3.1.2 Type “C” Soil must be sloped (benching Type “C” soil is not permitted).

3.2 **STEP 2:** The competent person must determine if the excavation or trench will be 4’ or greater and decide if they are going to slope, bench, or box the excavation or trench. Use **APX-013A Trenching and Excavation Checklist**.

3.2.1 Protective systems required in excavations less than 4ft in depth if signs of a potential cave in are present.

3.2.2 Protective systems (trench boxes, shield systems, benching, sloping) are required in 4ft or deeper excavation.

3.3 **STEP 3:** Once excavation or trench is dug to desired depth excavations must be inspected by the Competent Person using **APX-013A Trenching and Excavation Checklist** before any workers enter.

3.3.1 Lateral travel for employees to egress locations must not be more than 25ft in any direction.

3.3.2 Workers must not be working in proximity of operating excavation equipment while in the excavation.

3.3.3 All spoil piles and materials must be kept back at least 2ft from excavation edge.

3.3.4 Suspected hazardous atmosphere must be tested in excavations 4' in depth or greater.

3.3.5 Employees shall not work in excavations in which water has accumulated or is accumulating unless adequate precautions are in place to protect employees from hazards posed by the water accumulation.

References:

- APX-019A **Safety Training Matrix**
- APX-013A **Trenching and Excavation Checklist**

FORKLIFT PROCEDURE

1.0 Scope:

This procedure covers safe use of forklifts. “Forklift” means a mobile, power-propelled “truck” used to carry, push, pull, lift, and stack or tier materials. Common names include: forklifts, pallet trucks, rider trucks, fork trucks, JLG, rubber tired forklifts, lulls, lift-trucks and sky-tracks.

2.0 Training Requirements:

2.1 Initial training will be administered at the time of first assignment and will consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**).

2.2 Retraining will be conducted every three years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Procedures:

3.1 Only Certified and Authorized personnel are permitted to operate a forklift.

3.2 Each forklift operator is required to inspect the forklift equipment at the start of each shift.

3.3 Forklifts that are found to be in need of repair or are unsafe are to be immediately taken out of service.

3.4 Non-operator personnel are to stay clear of forklifts while they are being operated.

3.5 Stunt driving and horseplay are not permitted.

3.6 All forklifts must be equipped with seat belts and utilized by the operator when in use.

3.7 Personnel are not permitted to ride on forklifts except in designated seats that are part of the equipment design.

3.8 All forklifts must have a dry chemical fire extinguisher.

3.9 Forklifts must have a functional horn and back-up alarm with a distinctive sound loud enough to be heard clearly above background noises. There are other scenarios where a flashing yellow/amber light needs to be installed.

3.10 No modifications or additions, which effect the capacity or safe operation of the equipment, should be made without the manufacturer’s written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals should be changed accordingly.

3.11 All forklifts should have the manufacturer’s nameplate showing its weight with attachments, lifting capacity, lift height maximum and other pertinent data.

3.12 Grades must be ascended slowly with the forks in the direction of travel and slowly in reverse when descending.

3.13 When ascending or descending grades in excess of 10 percent, loaded forklifts must be driven with the load upgrade.

3.14 On all grades, the load and load engaging means must be tilted back if applicable and raised only as far as necessary to clear the road surface.

3.15 No one is allowed to stand or pass under the elevated portion of any forklift, whether or not the forklift is loaded or empty.

3.16 There must be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.

3.17 Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the forklift. When a forklift is left unattended, forks must be fully lowered, controls must be neutralized, power shut off, and brakes set. Wheels must be blocked if parked on an incline.

3.18 A safe distance must be maintained from the edge of ramps or platforms while on any elevated dock, or platform.

3.19 Brakes must be set to prevent movement of trucks, and trailers while loading or unloading. Prior to forklift entry, the flooring and frames of trucks and trailers must be checked for breaks and weakness before they are driven into and to determine if it will bare the intended weight of the forklift and intended load.

3.20 Dock board or bridge plates must be properly secured, driven over carefully and slowly, and their rated capacity never exceeded. Portable dock boards must be secured in position by being anchored or equipped with devices that prevent their slipping.

3.21 An overhead guard must be used as protection against falling objects. Overhead guards are intended to offer protection from impact of small packages, boxes, bagged material, etc. representative of the job application, but not to withstand the impact of a falling capacity load. Additional counter weighting of forklifts must not be allowed unless approved by the manufacturer.

3.22 Refueling and battery charging operations must be performed only in designated areas. Open flames, smoking, sparks or electric arcs must be eliminated from refueling.

3.23 All forklifts **must** be properly positioned and brakes applied before attempting to refuel or change/charge battery.

3.24 Forklifts **must** maintain 10 feet of clearance from powerlines.

3.25 You must use a spotter in any tight space or when visibility is limited.

3.26 A Forklift Inspection Form must be completed daily. (Reference **APX-014A Daily Forklift Inspection Form**)

References:

- **Applicable Manufacturer Manuals**
- APX-014A **Daily Forklift Inspection Form**
- APX-019A **Safety Training Matrix**
- T-14 **Forklifts (Lull) Construction**
- T-35 **Industrial Forklifts**

TOOL PROCEDURE

1.0 Scope:

This procedure covers safe use of Hand and Power Tools.

2.0 Training Requirements:

2.1 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.1.1 Personnel required to work with hand and power tools must receive applicable and appropriate training as required per manufacture instructions.

2.1.2 Authorized operators of Powder-Actuated tools shall receive training on safe use and care at time of first assignment and every 5 years thereafter.

2.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager and/or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Procedures:

3.1 All personnel are required to use applicable Personal Protective Equipment (PPE) when working with tools.

3.2 Electrically-powered tools are not to be carried, toted, hoisted, lowered or handled by their electrical cords.

3.3 All power tools plugged into temporary power are to be used in conjunction with a Ground Fault Circuit Interrupter (GFCI). All tools on permanent power are to be used with GFCI pigtails.

3.4 Where practical/feasible, tools are to be used to hold chisels, stakes and other implements driven or struck with a hammer/mallet. Hands are to be kept clear of such impact tools.

3.5 Tools **should not** be dropped or thrown.

3.6 Wear tool pouches on the side.

3.7 Guards are NEVER to be removed from tools.

3.8 Tools that cannot be safely carried in a tool belt when working with ladders are to be transported by rope (once personnel are safely in position) or other means.

3.9 All personnel are to protect others from the dropping of tools and equipment. Protective nets/meshing and/or barricades are to be established when injury from falling objects is possible. No one is allowed to work under areas with tool use without the proper protection from falling objects.

3.10 All tools are to be visually inspected BEFORE use. Only authorized personnel are allowed to repair tools. Contact your supervisor immediately if there is a concern with any of your tools.

3.11 Defective tools must be stored where they cannot be used. No one is allowed to operate tools/equipment that are defective.

3.12 Tools are ONLY to be used according to manufacturer specifications.

3.13 Tools are not to be left on ladders, scaffolding or elevated work surfaces, if not in use.

3.14 ONLY non-sparking tools are to be used in work areas where sources of unintentional ignition are present.

3.15 Tools/equipment designed for a fixed location are to be securely anchored.

3.16 Loose/frayed clothing, long hair, dangling ties, finger rings, etc. are not to be worn around moving tool/equipment parts or other sources of entanglement.

3.17 Compressed air is not to be directed towards any person or body part.

3.18 Proper PPE **must be worn** at all times while grinding (hardhat, safety glasses, face shield and gloves).

3.19 Sharp tools (chisels, screwdrivers, knives and pointed objects) are not to be carried in pockets.

3.20 When carrying such objects by hand, ALWAYS keep the sharp or pointed end facing away from your body and from others.

3.21 Lengths of pipe (or other similar materials/ tools) are NOT to be used as an extension of a tool to increase torque

3.22 Hammers are not to be used to loosen bolts or nuts.

3.23 Screwdrivers are NOT to be used as chisels.

3.24. Files are NOT to be used to punch or pry and are to be equipped with handles.

3.25 Powder-actuated tools require special training and certification to become an "Authorized Operator". Cards must be provided to all Authorized Operators and must remain in their possession at all times of powder-actuated tool use. In addition, the following rules apply:

3.26 Safety glasses/goggles, face shields, hardhats and hearing protection are mandatory (to be used at all times) when using powder-actuated tools. Hearing protection is mandatory (to be used at all times) for all other employees in the immediate work area of powder-actuated tool use.

3.27 NEVER use powder-actuated tools in explosive or flammable areas.

3.28 NEVER use powder charges, studs or fasteners not specified by the manufacturer for the applicable tool being used.

3.29 ALWAYS remain aware of the strength and thickness of materials for which this tool is being used on. Operators of this tool are to check for personnel on the opposite side of soft/thin materials and ensure that they are not present before resuming operation.

3.30 NEVER load these tools until just before use.

3.31 NEVER leave this tool loaded.

3.32 NEVER point this tool (loaded or unloaded) at anyone.

3.33 Authorized Operators are to test (according to manufacturer's recommendations) the tool each day before loading to ensure a safe working condition.

References:

- **Applicable Manufacturer Manuals**
- APX-015A **OSHA Standard Interpretation**
- APX-015B **OSHA Standard Interpretation**

VEHICLE FLEET PROCEDURE

1.0 Scope:

Operation of a company vehicle is both a privilege and a responsibility, not a right. Drivers are responsible for operating the company vehicle according to state and federal laws and FSG Company policy. Violation of these laws and rules could result in the removal of driving privileges.

1.1 **Assigned Driver** – No person other than the employee assigned to the vehicle shall operate the vehicle unless that person is an employee of FSG, is listed on the approved driver list and has the permission from the person to whom the vehicle is assigned or from a supervisor.

1.2 All mobile phone use should be hands free for any approved FSG driver while driving. All drivers should pull over safely to make or receive a call if needed.

1.3 Possession, transportation or consumption of alcohol or illegal drugs by anyone in a company-owned vehicle is not allowed.

1.4 Driver and all passengers must wear available personal restraints.

1.5 It is safer to park by backing into the spot or pull through. Backing into parking spots at general work sites is required. Think about your departure upon your arrival.

1.6 Personal Use of Company Vehicles – Company-owned vehicles are to be used for company business only. Personal use of a company vehicle is prohibited, unless specifically authorized by management. Personal trailers, including boat and recreational vehicles, are prohibited.

1.7 FSG is not responsible for fines and applicable handling fees of traffic violations or parking tickets associated with a person's vehicle use, whether using a personal vehicle or company-provided vehicle.

1.8 Lock all doors, completely raise all windows, remove (and take) keys, engage the parking brake (if on an incline/decline) and secure/lock external equipment (like a toolbox) whenever leaving your vehicle, unless the project rules do not allow.

1.9 NEVER place an unauthorized sticker on any FSG provided vehicle.

1.10 In the event of an accident while driving a company vehicle perform the following:

- 1.10.1 Contact emergency medical service if required.
- 1.10.2 Immediately contact your supervisor and the Safety Risk Manager to report the incident.
- 1.10.3 Do NOT admit guilt.
- 1.10.4 Call local law enforcement
- 1.10.5 Do NOT leave the scene until law enforcement has completed their investigation.
- 1.10.6 If law enforcement does not respond, be sure to obtain all necessary contact and insurance information of everyone involved, including witness information.
- 1.10.7 Obtain a copy of any personal citations (if applicable) and notify your supervisor immediately if cited.
- 1.10.8 Complete the **APX-004C Incident Accident Report**.

1.11 Take pictures of your vehicle and the other vehicle involved. A picture is worth a thousand words.

2.0 Training Requirements:

2.1 Anyone operating a company-owned vehicle, or an employee that receives an allowance for their personal vehicle, shall receive at the time of hire a Travelers Defensive Driving Class and instructor ride along. Drivers must attend an annual Travelers Defensive Driving refresher.

2.2 Retraining Vehicle Accident:

2.2.1 Provide the appropriate Travelers Driver Safety Course and document using a Pronto sign in sheet.

2.2.2 Employee must pay at their own expense for a state defensive driving course and receive a satisfactory grade.

2.2.3 Provide a vehicle ride along with documentation. Pronto Form T22 Driver Assessment.

3.0 Driver Qualifications:

3.1 Must be at least 21 years old.

3.2 To operate a commercial motor vehicle, the driver must be at least 21 and have a valid license for the vehicle to be operated which may include a Commercial Driver's License (CDL).

3.3 Must be on the company's approved driver list.

3.4 Must pass the Travelers Written and Pronto Field Driving Assessment within 30 days of hire or within 30 days of being added to the approved driver list.

3.5 Drivers must not have 3 or more moving violations/suspensions or major violation within 36 months.

4.0 Drivers of Company-Owned Vehicles

4.1 Employee driving records will be checked at least every 12 months to make sure the employee has an acceptable record to operate a company vehicle.

4.2 Any driver with the any of the following categories will immediately be relieved of his/her company vehicle driving privileges:

4.3 Any **major** violation. The following are defined as major violations:

4.3.1 DWI or equivalent in past three years.

4.3.2 Failure to stop/report an accident.

4.3.3 Reckless driving/speed contest.

4.3.4 Driving while impaired.

4.3.5 Making a false accident report.

4.3.6 Homicide, manslaughter or assault arising from the use of a vehicle.

4.3.7 Driving while license is suspended/revoked.

4.3.8 Careless driving.

4.3.9 Attempting to elude a police officer.

4.3.10 Leaving the scene of an accident.

4.3.11 Texting or emailing while driving.

4.3.12 Failure to follow local/state regulations regarding cell phone usage while operating a motor vehicle.

4.3.13 Any employee permitting fellow employees, dependents or any other person not listed on the driver list to operate vehicles under their control or assigned to them.

4.3.14 Suspension of driver's license within the last three years.

4.3.15 Failure to consistently drive in a safe manner as determined by management.

4.3.16 Failure to pass a drug test.

4.3.17 Refusal to take a drug test.

4.3.18 Failure to notify management within one business day of any moving violation and/or accident.

Drivers are required to immediately notify management if their driving status changes.

5.0 Use of Personal Vehicle for Company Business

5.1 Anyone that uses their personal vehicle for any company business must be on the approved driver list.

5.2 All those who use their personal vehicle for company business must observe the same policies governing the use of company-owned vehicles.

5.3 In addition to the above, the driver must provide a certificate of insurance that shows liability limits of at least $100,000/$300,000/$50,000.

6.0 Vehicle Inspections

6.1 The drivers of Company Vehicles are responsible for completing **APX-016A Monthly Vehicle Checklist** at the end of every month. Any faulty equipment should be noted on the inspection report. The written vehicle inspection checklist should be turned in to your Local Safety Coordinator. Company vehicles will be subject to spot-checks by management.

6.2 Company vehicles must have the following standard items:

6.2.1 Current insurance verification

6.2.2 Safety belt ready for use

6.2.3 Fire extinguisher (Service Vans, Bucket trucks, work trucks)

6.2.4 Usable spare tire, jack and lug wrench

6.2.5 Binder with the following forms and information:

6.2.6 Accident investigation form

6.2.7 Operator's manual

7.0 Maintenance and Upkeep

7.1 Drivers are responsible for ensuring the vehicle is well maintained. The assigned driver is responsible for taking the vehicle to approved service stations to have scheduled fluid changes, brake jobs, tire changes and other repairs completed. Turn in all repair receipts and maintenance records for filing in the vehicle's maintenance file. The employee is responsible for reporting any damage, faulty equipment or other needed repairs to his/her supervisor. The employee is also responsible for making sure the equipment is safe to operate on the road. Also, replace burned out bulbs and fuses for lights, turn signals, headlights and horn immediately.

7.2 The employee is responsible for keeping his vehicle as clean and orderly as job conditions permit, i.e.; cigarettes, chewing tobacco, smokeless tobacco.

8.0 At-Fault Accidents

8.1 If you are involved in an at-fault accident, as determined by the Branch Manager and/or Branch Safety Committee, in a company vehicle, you will be responsible for paying for the cost of the damage or the first $1000 of any cost of that accident (whichever is less) or your annual bonus will be reduced by that amount.

8.2 If you are involved in a vehicle accident refer to **SMS-004 Incident Procedures** and follow the steps for vehicle accidents and complete form **APX-004C Vehicle Accident Report**.

8.3 Provide the appropriate Travelers Driver Safety Course and document using a Pronto sign in sheet.

8.4 The SRM will help facilitate the appropriate State Defensive Driving course for employee involved in at fault accidents.

8.5 Provide a vehicle ride along with documentation. **Pronto Form T22 Driver Assessment**

8.6 Complete a Vehicle Accident Follow-Up Memo and review with the employee.

9.0 Drug Testing

9.1 Any employee who will drive a company vehicle or personal vehicle for company business will be drug-tested at hire, randomly and for cause. The drug testing procedure will follow the established company drug policy.

9.2 Management's Responsibility:

9.2.1 Each supervisor is responsible for all vehicles and drivers under their control.

9.2.2 Each supervisor will spot check vehicles on a monthly basis and random basis in writing and turn the report in to the fleet manager

9.2.3 It is the responsibility of the Safety Coordinator to follow up on all vehicles and all drivers to make sure this policy is implemented and enforced.

9.2.4 Keeping the qualified drivers list up to date is the responsibility of the Branch Fleet Manager or his or her designee.

10.0 Incident Review Committee

10.1 The Incident Committee will review all accidents to determine if they were preventable or non-preventable. The Incident Review Committee findings will become a part of each driver's personal file.

References:

- APX-004C **Vehicle Accident Report**
- APX-016A **Monthly Vehicle Checklist**
- SMS-004 **Incident Procedures**

SILICA-RESPIRATORY PROTECTION

1.0 Scope:

The purpose of an exposure control plan is to set out FSG's approach to protecting workers from harmful exposure to airborne silica dust.

2.0 Training Requirements:

2.1 All FSG employees are informed about the contents of this Silica Procedure and provided with adequate education and training to work safely with and around materials that contain silica.

2.1.1 Initial training will be administered at the time of first assignment and will consist of classroom lecture and practical demonstration for proficiency. All workers potentially exposed to airborne silica dust will be trained in the following: (Reference **APX-019A Safety Training Matrix**)

2.1.1.1 Hazards associated with exposure to silica dust.

2.1.1.2 The risks of exposure to silica.

2.1.1.3 Signs and symptoms of silica disease.

2.1.1.4 Safe work procedures to be followed (e.g., setup of enclosures, disposal of silica waste, personal decontamination).

2.1.1.5 Use of respirators and other personal protective equipment (e.g., donning and doffing of personal protective equipment, and cleaning and maintenance of respirators).

2.1.1.6 Use of control systems (e.g., LEV and wet methods).

2.1.1.7 How to seek first aid (for example, the location and use of eyewash stations).

2.1.1.8 How to report an exposure to silica dust.

2.1.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Silica Work Procedure:

3.1 **STEP 1:** Identify the work activities that would put workers at risk of silica exposure and write these activities on your daily JHA. Use **APX-017A Silica Exposure Control Matrix** as a reference for task specific controls.

3.1.1 Work activities that may generate airborne silica dust. For silica, the route of exposure is through the inhalation of airborne dust.

3.1.2 Identify workers at risk of exposure. For example, workers who finish concrete would be at greater risk of exposure than plumbers or electrical workers.

3.1.3 Amount of exposure. Some work activities generate more dust than others, and the amount of exposure should be estimated. Resources are available that provide air sampling data and compare silica dust levels from various construction activities. (Use **APX-017A Silica Exposure Control Matrix**)

3.1.4 Duration of exposure. Workers who grind concrete for a full shift would be at greater risk than workers jackhammering for an hour.

3.2 **STEP 2:** Once you have identified the work activities that would put workers at risk of exposure, you need to look at the effective control options that will be used to eliminate or reduce the risk to employees from the hazards of silica dust exposure. These control options should be listed on your daily JHA.

3.2.1 Elimination/substitution (e.g., using products with less silica or using work methods that would eliminate the need for surface grinding).

3.2.2 Engineering controls (e.g., water, local exhaust ventilation, enclosure, tool HEPA Dust Caps).

3.2.3 Administrative controls (e.g., coordination of tasks with subcontractors, signage)

3.2.4 Personal protective equipment (e.g., coveralls, respiratory protection)

4.0 Documentation

4.1 This Silica exposure control procedure will be reviewed at least annually and updated as necessary, in consultation with the health and safety council and the Safety Risk Managers. Records must be kept of the following:

4.1.1 All workers who are exposed to respirable silica dust while on the job.

4.1.2 Worker education and training sessions.

4.1.3 Respirator fit testing.

4.1.4 Equipment maintenance and repair.

4.1.5 Worksite IH inspection and testing.

5.0 Respiratory Protection Scope

This section establishes written procedures for respiratory protection. The SRM and SC have listed responsibilities for this program. A qualification process is mandatory and required to meet all the requirements of this section prior to any respiratory exposure.

5.0.1 All FSG employees are informed about the contents of this Silica and Respiratory Protection Procedure and provided with adequate education and training to work safely when required to utilize respiratory protection. (Reference **T-32 Crystalline Silica & Respiratory Training**).

5.0.2 Initial training will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

5.0.3 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

5.1 Respirator Selection

5.1.1 **STEP 1:** Employee shall be provided with a filtering face piece, half mask, and full face piece respirator with appropriate cartridges for the task. Respirator shall be a size suitable to fit the employees face and properly fit tested using an approved qualitative method.

5.1.2 **STEP 2:** Respirator shall be a size suitable to fit the employee's face and properly fit tested using an approved qualitative method.

5.1.2.1 A fit test of the respirator for each "Qualified Employee" must be conducted prior to any exposure every time before use.

5.1.2.2 The test must be performed using the 3M Fit Test Kit (FT-10) or equivalent.

5.1.2.3 The test must be conducted by an SRM or SC.

5.1.2.4 The test must be repeated on all Qualified Employees annually and documented.

5.1.2.5 Proper use training of the respirator or equivalent must follow the guidelines of the manufacturer. The manufacturer's instruction document must be reviewed with each Qualified Employee upon time of first assignment. The SRM must review the document with the Qualified Employee and sign that he or she understands, and will comply.

5.1.2.6 The SRM must review the proper use of the respirator annually with all Qualified Employees.

5.1.3 **STEP 3:** Respirator Medical Evaluation must be given to a qualified employee and the employee must be deemed fit for duty before respirator use.

5.1.3.1 Medical evaluation must be performed on-line with a 3M Authorized Service Provider. An Approval and Evaluation Letter from a qualified third party must be reviewed by the SRM for proper respirator use conditions.

5.1.3.2 The test must be repeated on all Qualified Employees annually and documentation of the test to be filed on site.

5.1.4 **STEP 4:** Storage of respirator when not in use must meet manufactures' guidelines for proper storage.

5.1.4.1 Storage bag must be clearly labeled with the employee's name.

5.1.4.2 Storage of respirator when not in use must be secured to prevent others using your respirator.

5.1.4.3 Random inspections will be performed by the SRM or SC.

5.1.4.4 The cleaned respirator should be stored away from contaminated areas when not in use.

5.1.5 **STEP 5:** Respirator replacement and cartridge replacement will be on, at least, the first scheduled shift of each month if not sooner depending on respirator use. The SRM or SC will assign new respirators or cartridges to employees as needed.

5.1.5.1 Cartridge replacement must follow all 3M's Replacement Procedures and Recommendations.

5.1.5.2 The DRM and SRM will conduct an annual review of Cartridge Replacement Procedure.

5.1.5.3 Random inspections will be performed by the SRM or SC.

5.1.5.4 Random Cartridge audits will be performed by the SRM or SC.

5.1.6 **STEP 6**: Respirator Cleaning must be conducted after each use in accordance with the manufactures' guidelines and requirements.

5.1.6.1 Remove cartridges prior to cleaning.

5.1.6.2 Clean face piece (excluding filters and cartridges), with 3M 504 # (07065) respirator wipes or equivalent. A secondary method, required weekly for cleaning, by immersing in warm cleaning solution, water temperature not to exceed 120 degrees F, and scrub with soft brush until clean. Add neutral detergent if necessary. Rinse in fresh, warm water. Air dry in non-contaminated atmosphere.

5.1.6.3 Disinfect face piece once daily by soaking in a solution of 1 oz. of bleach in 2 gallons of water. Rinse in fresh, warm water. Air dry in non-contaminated atmosphere.

5.1.6.4 DO NOT use cleaners containing Lanolin or other Oils.

5.1.6.5 DO NOT use solvents for cleaning.

5.1.7 **STEP 7:** Qualified Employee must inspect their respirator before use to ensure proper operating condition. Damaged or defective parts must be replaced with a new respirator.

5.1.7.1 Check for face seal air leakage. If you can't achieve a proper seal, DO NOT enter contaminated area. See SRM or SC for assistance for respirator replacement.

5.1.7.2 Check the face piece for cracks, tears, and dirt. Examine the inhalation valves for signs of distortion, cracking, or tearing.

5.1.7.3 Check that the head straps are intact and have good elasticity.

5.1.7.4 Examine all plastic parts and gasket areas for signs of cracking or deterioration and replace if necessary. Remove the exhalation valve cover and examine the exhalation valve and seat for signs of dirt, distortion, cracking, or tearing. Replace mask if necessary.

5.1.7.5 Random inspections will be performed by the SRM or SC.

References:

- APX-017A **Silica Exposure Control Matrix**
- APX-019A **Safety Training Matrix**

CRANE AND BUCKET TRUCK PROCEDURE

1.0 Scope:

This procedure covers safe use of Cranes and Bucket Trucks.

2.0 Training Requirements:

2.1 Initial training for bucket truck will be administered at the time of first assignment and will consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.2 Initial training for cranes will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency provided by an outside third party provider. (Reference **APX-019A Safety Training Matrix**)

2.3 Initial training for rigging will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency provided by an outside third-party provider. (Reference **APX-019A Safety Training Matrix**)

2.4 Retraining for bucket truck will take place every 3 years and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

2.5 Retraining for cranes will take place every 5 years by an outside provider. (Reference **APX-019A Safety Training Matrix**).

2.6 Retraining for rigging will take place every year and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Crane Procedures:

3.1 Only persons designated by FSG as a Competent Operator shall be permitted to operate cranes.

3.2 Cranes shall not be operated beyond 90% (percent of their configured lifting capacity) at the specified boom length in calm conditions. Any lift 75% or more of a crane capacity requires a lift plan. All lift plans must be approved by the Safety Risk Manager and/or stamped by a Registered Professional Engineer.

3.3 Outriggers shall be fully extended when loads are being lifted, and the crane shall be in the level position.

3.4 Prior to any lift, the ground shall be inspected to verify that the surface will bear the weight of the crane and its intended load.

3.5 The swing radius of cranes shall be marked with a barrier to warn others (on the ground or in other equipment) of its swing radius.

3.6 Only established hand signals shall be used to direct the crane operator during lifting operations. Only designated persons are permitted to give hand signals to crane operators, except during an emergency. In the case of an emergency, any person may give a stop signal.

3.7 The crane operator is responsible for making the decision to initiate the lift.

3.8 Crane operators are required to wear the minimum required personal protective equipment (hard hat, safety glasses, high viz FR vest, FR full body harness, cut rated gloves, etc.)

3.9 Crane Operators that perform welding must be a certified welder and are required to wear the minimum required personal protective equipment (hard hat, shield, FR PPE, full body harness, welder's gloves, etc.)

3.10 Employees shall not be permitted within the crane radius or conducting any service activity on a crane while it is being moved, lifting a load, or being operated in any manner.

3.11 The boom of cranes shall be in the lowered and retracted position when moving from location to location.

3.12 During severe storm or weather conditions the crane boom shall be lowered or placed in a position that precludes damage to the crane itself or immediate surroundings.

3.13 Overhead Clearance:

3.13.1 The operation of mobile equipment near energized electrical power lines shall conform to section 1926.1408(a)(2) which require 20' of clearance away from power lines. If a variance is required please contact your Safety Risk Manager.

3.13.2 A person shall be designated to observe clearance of the equipment and give timely warnings for all operations where it is difficult for the operator to maintain the desired clearance by visual means.

3.13.3 Cage-type boom guards, insulating links, or proximity warning devices may be used on cranes, but the use of such devices shall not alter the requirements of any other regulation of this part even if such device is required by law or regulation.

3.12.4 Any overhead wire shall be considered to be an energized line unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line and it has been visibly grounded.

3.13.5 Prior to work near transmitter towers where an electrical charge can be induced in the equipment or materials being handled, the transmitter shall be de-energized or tests shall be made to determine if electrical charge is induced on the crane. The following precautions shall be taken when necessary to dissipate induced voltages.

3.13.6 The equipment shall be provided with an electrical ground directly to the upper rotating structure supporting the boom. Ground jumper cables shall be attached to materials being handled by boom equipment when electrical charge is induced while working near energized transmitters. Employees shall be provided with non-conductive poles having large alligator clips or other similar protection to attach the ground cable to the load.

4.0 Crane Inspection:

4.1 Certification and inspection requirements are often subject to local requirements that must be identified before any lifts are made.

4.2 The Operator or other designated Competent Person shall inspect cranes prior to their use each day for defects, and unsatisfactory conditions. (Reference **APX-018A Daily Crane Inspection Form**)

4.3 If defects or other unsafe conditions are found during an inspection, the crane shall be taken out of service until repairs have made. A record of repairs and associated maintenance of cranes shall be documented.

5.0 Rigging (Slings, Hooks and Chains):

5.1 All rigging hooks and hooks on cranes, except shagging hooks shall have a safety latch or be "moused".

5.2 Each sling shall be accompanied with a "Sling Rating Tag". This tag will identify the maximum amount of load the sling is able to sustain.

5.3 Slings, hooks, and other rigging equipment shall be used in accordance with their designed purpose and manufacturer's specifications.

5.4 Tag lines shall be used to guide and control loads that are being lifted and moved. Employees shall not be allowed to guide loads directly with their hands.

5.5 Employees shall be required to keep clear of loads being moved and lifted.

5.6 Employees shall not be permitted to ride or be on suspended loads being lifted or moved by cranes.

5.7 Rigging equipment such as nylon slings and wire rope slings shall not be used in conjunction with personal fall protection equipment or fall protection systems. This includes using rigging equipment as anchor points, beam wraps, or an extension of a fall arrest system.

5.8 Inspection

5.8.1 An inspection program for all slings, hooks and chains shall be implemented wherever slings and hooks are used in rigging and to lift loads. Manufacturer guidelines shall be followed for inspections.

5.8.2 Defective rigging equipment shall be tagged "Do Not Use" and taken out of service and removed from the work area if practical. If repairs cannot be made or repairs are prohibited, the equipment shall be destroyed or returned to the owner.

5.8.3 A Competent Person shall periodically inspect the condition of lifting hooks. Hooks that are deformed, or stretched 10% of the throat or 15% twist shall be removed from service, and destroyed.

6.0 Bucket Truck Procedure:

6.1 Before starting work, the operator shall perform an inspection and test to insure that all ground level and bucket controls are in proper working order. (Reference **APX-018B Bucket Truck Inspection Form**).

6.2 The vehicle's brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface. Wheel chocks shall be in place before using an aerial lift.

6.3 The operation of Bucket Trucks near energized electrical power lines shall conform to section 1926.1408(a)(2) which require 20' of clearance from powerlines. If a variance is required please contact your Safety Risk Manager.

6.4 A full body harness shall be worn and a lanyard attached to the boom of the basket when working from an aerial lift. The manufacturer's designated anchor point must be used.

6.5 Operators shall always stand firmly on the floor of the basket, and shall not sit or climb on the end of the basket or use planks, ladders, or other devices for a work position.

6.6 When the boom must be maneuvered, the bucket operator shall always face in the direction in which the bucket is being moved.

6.7 Depending on the activity all necessary PPE, including an approved hard hat, shall be worn while in the bucket. Ground personnel shall also wear necessary PPE and approved hard hat.

6.8 Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed and locked position.

6.9 The vehicle's warning lights/strobes and the 4-way flashers shall be used at all times while work is being done on road right-of-way. Leaving the vehicle's head lights ON for additional visibility is recommended as a best practice.

6.10 When work being done in the road right-of-way will exceed one hour, a work zone shall be established that follows the most current MUTCD guidelines. **APX-018C Manual on Uniform Traffic Control Devices**

6.11 Traffic cones shall be placed approximately 3 to 5 feet out from the affected corners of the vehicle on the traffic side along with a rear bumper. APX-018C Manual on Uniform Traffic Control Devices.

6.12 In order to prevent injuries, when working in an area where pedestrians may pass beneath or in close proximity to the aerial lift's swing perimeter, the aerial lift operator shall establish a "safety zone" that adequately guards or restricts the area.

6.13 An aerial lift truck may not be moved when the boom is elevated in a working position with employees in the basket except for equipment which is specifically designed for this type of operation.

References:

- APX-018A Daily Crane Inspection form
- APX-018B Bucket Truck Inspection Form
- APX-018C Manual on Uniform Traffic Control Devices

TRAINING PROCEDURE

1.0 Scope:

This procedure applies to Safety Risk Managers and Safety Coordinators who conduct training. This procedure will ensure trainers have the necessary skills and knowledge to ensure occupational health and safety (OHS) on boarding, information and training is provided with the appropriate skill and knowledge necessary. It is important that training be conducted consistently throughout all FSG Divisions so as to ensure employees are trained and qualified to the highest standards of competence.

2.0 Training

2.1 Safety Risk Managers and Safety Coordinators will be required to possess at least five years of construction safety, or a college degree in accordance with OSHA Guidelines before they provide any safety related training to FSG employees. In addition, Safety Risk Managers and Safety Coordinators must attend an OSHA 500 and 510 for construction before they instruct FSG employees. (Reference **APX-019A Safety Training Matrix**)

2.1.1 Safety Risk Managers and Safety Coordinators shall obtain the necessary "Train The Trainer" credentials before any specialty training is conducted (i.e. Scissor Lift, Forklift, CPR/First Aid), in addition to the necessary requirements listed in section 2.1.

2.1.2 Any electrical, Energized Safety Work Practices (**ESWP T9** and **T13**) training shall be conducted by an individual who is at least a licensed Journeyman, Master electrician or greater, in addition to the necessary requirements listed in section 2.1.

2.2 Retraining for OSHA 502 must be completed every 4 years to remain active as an FSG Trainer. (Reference **APX-019A Safety Training Matrix**).

3.0 Procedure:

3.1 The Safety Risk Manager or Safety Coordinator or their designee are responsible for ensuring that all employees are on-boarded into the workplace at time of first assignment utilizing the FSG Onboard Training Videos and assessments. This on-board training should be recorded utilizing the Pronto Safety Sign in Sheet, or equivalent form. On-board training is located on a thumb drive and this is the only training allowed for on board training.

3.2 In addition to the requirements in 3.1 all field employees shall receive an OSHA 10 hour training with in 60 days of first assignment.

3.3 Superintendents or anyone that supervises field employees shall obtain an OSHA 30 hour within 60 days of first assignment.

3.4 The Safety Risk Manager or Safety Coordinator in consultation with management shall identify, schedule, conduct and record training into Safety Intel for each individual employee as required by **APX-019A Safety Training Matrix**.

3.5 To assist in closing competency gaps and ensure that knowledge has been retained, the Safety Risk Manager or Safety Coordinator shall conduct field competency assessments utilizing the appropriate Pronto Training Assessment as required by **APX-019A Safety Training Matrix**, or if circumstance warrant retraining. Circumstances where a review of employee competency levels or training may be required include:

3.5.1 Failure to safely follow any FSG safety procedure or policy

3.5.2 Any occurrence of an incident or accident

3.5.3 Training which has expired or is about to expire

3.6 Any employee safety training shall be reviewed and approved by the Safety Department before it is administered. Training for all procedures in the Safety Management System has been developed and shall be utilized.

References:

- APX-019A **Safety Training Matrix**
- **Pronto Field Assessment**
- **Pronto Signoff Sheet**

FIRST AID AND BLOODBORNE PATHOGEN

1.0 Scope:

This procedure is for CPR/First Aid and Bloodborne Pathogens. First Aid is the initial care provided to an injured employee and is usually given by someone "on the spot". First Responders administering first aid are needed to provide immediate assistance until a qualified health care professional arrives and takes control of the situation or the injured employee recovers.

2.0 Training Requirements:

2.1 Initial training for CPR/First Aid and Bloodborne Pathogens will be administered at the time of first assignment and consist of classroom lecture and practical demonstration for proficiency provided by a certified trainer through the American Red Cross, American Heart Association and Basic First Aid, or an outside third-party provider. (Reference **APX-019A Safety Training Matrix**)

2.2 Retraining for CPR/First Aid and Bloodborne Pathogens will take place every 2 years and consist of field classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**).

3.0 CPR/First Aid Procedures:

3.1 A person providing CPR/First Aid should:

3.1.1 Assess the situation quickly – check for danger

3.1.2 Identify the nature of the injury or illness as much as possible

3.1.3 Call 911 or emergency services

3.1.4 Manage the injury appropriately and promptly

3.1.5 Stay with the injured employee until able to hand over to a health care professional

3.1.6 Give further help if necessary or as directed

3.2 Notification and Reporting of Injuries and Illnesses

3.2.1 Safety Risk Manager shall keep a log of all treatment provided and first aid equipment dispensed.

3.2.2 Any first responder or employee who provides CPR or first aid to an injured employee must complete an Accident, Incident and Injury Report (Reference **APX- 004C Incident/Accident Investigation**) within 24 hours.

3.2.3 Employee providing first aid should record as much information as possible for each injury. This information is vital when handing over the injured employee to a health care professional. Information that should be recorded includes:

3.2.3.1 The name and contact number of the injured employee

3.2.3.2 Details about the nature of the injury

3.2.3.3 Details of the time and date of the incident

3.2.3.4 Details of treatment given

4.0 Bloodborne Pathogens Procedure

4.1 All employees shall adhere to the Universal Precautions method, that is, all human blood and Other Potentially Infectious Materials (OPIM) shall be treated as known to be infectious for HIV, HBV (Hepatitis B Virus), HCV (Hepatitis C Virus) or other bloodborne pathogens. Where differentiation of types of body fluids is difficult or impossible, all body fluids are to be considered potentially infectious. Appropriate personal protective equipment shall be utilized at all times.

4.2 Engineering controls and work practice controls are to be the primary methods used to prevent occupational transmission of HBV and HIV.

4.3 All employees who come in contact with the blood of another person or other potential infectious materials shall wash their hands and any other skin with soap and water; if contact with eyes, mouth or nose, flush area with water immediately or as soon as possible following such contact.

4.4 When hand washing facilities are unavailable, employees shall use antiseptic cleanser and paper towels or antiseptic towelettes. All employees must know where the hand washing facilities and other hand washing supplies are located, if applicable.

4.5 If occupational exposures remain after instituting engineering and work practice controls, personal protective equipment (PPE) shall be used. Types of PPE include:

4.5.1 gloves

4.5.2 gowns

4.5.3 masks

4.5.4 mouthpieces

4.6 First Responders and Responsible Personnel shall have an Infection Protection Kit in their possession. Contents of an Infection Protection Kit should include the following items:

4.6.1 Antiseptic towelettes

4.6.2 Rubber latex gloves

4.6.3 Face mask

4.6.4 Disposable body gown and shoe covers

4.6.5 Protective eye wear

4.6.6 Biohazard bag with secure tie

4.6.7 Area Control Biohazard warning tape and signs.

4.7 Any surface that has been exposed to potentially infectious materials shall be decontaminated.

4.8 Hepatitis B vaccinations shall be made available to all employees who have an exposure incident to blood, at no cost, at a reasonable time and place, and under the supervision of a licensed physician/licensed healthcare professional.

4.9 All employees identified as First Responders or Responsible Persons, shall be immediately eligible to be pre-screened for the presence of Hepatitis B virus antibodies and to receive a Hepatitis B Vaccine at no cost to the employee within ten (10) working days of their designation as a First Responder or Responsible Person.

4.10 Employees shall sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. (Reference **APX-020B Declination of Vaccine**)

4.11 When any employee is subject to an exposure incident, regardless of whether or not that employee is a designated First Responder, the Safety and Risk Manager or Safety Coordinator shall:

4.11.1 Immediately refer that employee to the designated medical provider.

4.11.2 Ensure that the employee subjected to the exposure incident receives a confidential medical evaluation and follow up.

4.11.3 Provide the designated medical provider with a copy of the completed Blood and Fluid Exposure Report (**APX-020A Blood and Fluid Exposure Report**) as soon as possible following the investigation of the exposure incident.

4.11.4 Require the source individual submit to serological blood test to screen for the presence of Hepatitis B (HBV) and human immunodeficiency (HIV) virus antibodies.

4.11.5 Request the source individual provide the medical provider for the employee subjected to the exposure incident the results of all blood tests conducted on the source individual.

4.12 Any disposable contaminated materials shall be discarded by sealing within a plastic bag, which is then to be sealed in a red bag or one that is marked with a bio-hazard symbol.

4.13 Proper disposal of these items shall occur by coordinating with a local waste disposal company. Disposal of these items without such coordination is prohibited.

4.14 Work areas that contain processes where occupational exposure is known shall be marked with the biohazard symbol and include: “Warning Biohazard Area”.

4.15 Exposure and medical records will be maintained for thirty (30) years past the exposed employee’s last date of employment by Corporate HR and the Corporate Safety Department, as follows:

4.15.1 The name and social security number of the employee

4.15.2 A copy of the employees HBV vaccination status, including the dates of vaccination

4.15.3 A copy of the results of examinations, medical testing, and follow-up procedure

4.15.4 A copy of the information provided to the healthcare professional, including a description of the employee’s duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure

References:

- APX-004C **Inspection Accident Investigation and Root Cause Report**
- APX-019A **Safety Training Matrix**
- APX-020A **Blood and Fluid Exposure Report**
- APX-020B **Declination of Vaccine**

FALL PROTECTION AND ROPE ACCESS

1.0 Work Scope:

This document sets forth accepted practices for fall protection and rope access work.

2.0 Fall Protection Training Requirements:

2.1 All FSG employees must be trained and classified as Qualified and Authorized Persons before they are allowed to utilize fall protection equipment.

2.1.1 Initial training will be administered at the time of first assignment and will consist of classroom lecture and practical demonstration for proficiency. (Reference **APX-019A Safety Training Matrix**)

2.1.2 Retraining will take place annually and consist of field proficiency demonstration utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Fall Protection Requirements:

3.1 All employees are required to have adequate fall protection when the fall distance is six (6) feet or greater or there is an immediate danger to life and health risk at any height.

3.2 When these distances are met and/or exceeded, fall protection systems are required to be in use to perform work.

3.3 New employees must be oriented in fall protection awareness as part of the New Employee Orientation Program. Fall protection training may be provided to all employees.

3.4 (Personal) Fall Arrest Systems must do all of the following:

3.4.1 Limit maximum arresting force on an employee to 1,800 pounds. Note: total body weight including tools cannot exceed 310 lbs. to stay under arresting force limit

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

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

3.4.4 Have sufficient strength to withstand all components of the (personal) fall arrest system (lanyards, body harness and attached hardware, and shock-absorbing devices) must meet the design specifications of OSHA 1926.502 Subpart M.

3.5 All components must be inspected prior to each use for wear damage, and other deterioration.

3.6 The body harness type and size must meet the physical needs of its user (male/female or small, medium, large, etc.)

3.7 Follow the manufacturer’s guidelines on proper fit

3.8 Shoulder, thigh, button and chest straps must fit snugly whereas it is slightly difficult to slide the hand underneath.

3.9 All loose strap ends must be folded back under.

3.10 D-Ring placement should be between the shoulder-blades.

3.11 Chest straps should be positioned across the mid-chest area.

3.12 Anchorages must be used under the supervision of a Competent Person, as part of a complete (personal) fall arrest system that maintains a safety factor of at least two (i.e., capable of supporting at least twice the weight expected to be imposed upon it).

3.13 Anchorages used to attach (personal) fall arrest systems must be independent of any anchorage being used to support or suspend platforms and must be capable of supporting at least 5,000 pounds of force per person attached.

3.14 Anchorage points can include:

3.14.1 Lifelines (horizontal and vertical)

3.14.2. Designed anchorage points on aerial lifts

3.14.3 Eye-bolts listed for use by the manufacturer

3.14.4 Specially designed anchorage tools specifically designed to meet fall force requirements, including:

3.14.4.1 Wrap-around lanyards as approved by the manufacturer

3.14.4.2 L-beam clamps designed specifically as an anchorage point.

3.14.5 Prohibited anchorage points include, but are not limited to:

- Standard guardrails and railing
- Ladders/rungs
- Scaffolding, unless approved by the manufacturer for/with anchorage points
- Light fixtures, ductwork, conduit, pipe vents, wiring/duct/piping harnesses, other roof stacks, vents or fans

3.14.6 C-clamps

3.14.7 Piping (unless capable of meeting the criteria of an anchorage point)

3.14.8 To a lanyard (around a solid object), unless the lanyard and hardware is manufactured for that purpose.

3.15 Guardrails are used to protect (and warn of) the edges of areas that would otherwise expose anyone to falls. They can be found in many areas of the work site. Guardrail systems are only required to withstand 200 lbs. of outward and downward force, so do not use guardrails for climbing or allow materials to be stored against them.

3.16 Guardrail systems have a top rail 42 inches (+/- 3 inches) from the floor, with a mid-rail. Toe boards are used where materials are in the area that could be kicked off onto others below. Do not work in an area that the guardrail appears to be in need of repair or is missing.

3.17 Covers for protection from tripping, falls (personnel) and falling objects are used, secured and marked as holes/openings in the floor. These covers are required to support at least twice the expected weight that could cross over it. Plywood is a common “cover” material and must be at least ¾ inch thick.

3.18. Shock-absorbing lanyards are required to limit the fall force to less than 1,800 pounds.

3.19 Lanyards that do not limit free fall distance to 2 feet or less, such as rip-stitch lanyards and tearing/deforming lanyards must be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.

3.20 Horizontal lifelines must be designed, installed, and used under the supervision of a Competent Person, as part of a complete (personal) fall arrest system. Lifelines must be protected against being cut. Horizontal lifelines cannot exceed sixty feet in length.

3.21 Vertical lifelines must be utilized with leading edge work, must reach the ground, and the method of anchorage attachment must be of proper design (i.e. no knots). ONLY one person must be tied to a vertical lifeline at a time.

3.22 As required, Controlled Access Zone Systems is defined as follows:

3.22.1 Further than twenty-five (25) feet from any leading edge.

3.22.2 Control line shall extend parallel along the entire length of the unprotected or leading edge

3.22.3 Only trained employees are allowed in the Zone

3.22.4 The Zone shall have signage marking it as a “Controlled Access Zone”

3.22.5 A competent Person should appoint the”Safety Monitor” and ensure that the safety monitor is (has):

3.22.5.1 Competent in the recognition of fall hazards

3.22.5.2 Capable of warning workers of fall hazard dangers and in detecting unsafe work practices

3.22.5.3 Operating on the same walking/working surfaces of the employees and can see them

3.22.5.4 Close enough to work operations to communicate orally with the employees and has no other duties but the monitoring function

3.22.5.5 The authority to stop work

3.23 Only employees engaged in roof/surface work and the safety monitor should be allowed in an area where an employee is being protected by a safety monitoring system.

3.24 Employees utilizing aerial personnel lifts (e.g. articulating boom, knuckle-boom lift, sign trucks, etc.) must use a self-retracting lanyard/yo-yo fall arrest system, even though a guardrail system is in place.

3.24.1 Attachment points for these systems must be capable of withstanding 5,000 pounds and must be maintained in the floor of the lift or where designed by the manufacturer.

3.24.2 Rails of such lifts must not to be used as attachment points unless designed for that purpose by the manufacturer.

3.25 Employees working near a leading edge 6 feet or more above lower levels must be protected by guardrail, safety net, restraint/positioning, or (personal) fall arrest systems.

3.26 Body Harness Inspection must occur before every use.

3.26.1 Beginning at one end, holding the body side of the harness toward you, grasp one area of the harness with your hands six to eight inches apart. Bend the strap in an inverted “U”. Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, burn marks or chemical damage. Special attention should be given to the attachment of buckles and D-rings to strap webbing. Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface.

3.26.2 Rivets must be tight and unmovable with fingers. Body-side rivet base and outside rivet burr must be flat against the material. Bent rivets fail under stress. Especially note condition of D-ring rivets and D-ring metal wear pads (if applicable). Discolored, pitted, or cracked rivets indicate chemical corrosion.

3.26.3 The tongue or billet of bolts receives heavy wear from repeated buckling and unbuckling. Inspect for lost, distorted, or broken grommets. Harnesses using punched holes without grommets must be checked for torn or elongated holes causing slippage of the tongue buckle.

3.26.4 All employees involved in a fall with a fall distance of over six feet must be required to receive an immediate medical evaluation.

3.27 All components of a (personal) fall arrest system involved in any fall must be immediately and completely replaced. Such equipment must be tagged "Out Of Service" and sent back to the tool room for destruction.

3.28 A Fall Rescue Plan **must be "immediate" as defined by OSHA to be 3 - 4 minutes**.

4.0 Rope Access Training

4.1 Trained and Authorized Rope Access employees must receive training in Rope Access provided by a competent outside training organization such as Sprat. Training shall consist of the following levels:

4.1.1 **LEVEL I TECHNICIAN** (Rope Access Worker): An individual who performs rope access work. A Level I Technician may only work under the direct, on-site supervision of a Rope Access Lead Technician or Supervisor.

4.1.2 **LEVEL II TECHNICIAN** (Rope Access Lead Technician): An individual who is responsible for physically conducting rope access operations and/or safety evaluations of rope access operations, including maintenance of associated access equipment and performs all Rope Access Lead Technician duties as assigned in the employer's rope access work program.

4.1.3 **LEVEL III TECHNICIAN** (Rope Access Supervisor): An individual who is responsible for the overall rope access work site and performs all Rope Access Supervisor duties as assigned in the employer's rope access work program.

4.2 Field proficiency demonstration must be conducted annually utilizing Pronto Field Knowledge Assessment administered by Safety Risk Manager and / or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

5.0 Rope Access Procedure

5.1 Rope access work practices shall include the ability for self-rescue or prompt rescue by other rope access workers. All work plans shall include the necessary information for contacting the local emergency services.

5.2 Rope access work practices shall include the ability for self-rescue or prompt rescue by other rope access workers. All work plans shall include the necessary information for contacting the local emergency services.

5.3 List the rope access systems to be used for the proposed work.

5.3.2 List the members of the work team by name and identify their duties.

5.3.3 List the rope access equipment to be used for the work to be performed.

5.3.4 List the hazards associated with the work to be performed and actions to be taken to mitigate the hazards.

5.3.5 List appropriate personal protective equipment (PPE) to be used.

5.3.6 List provisions for providing security to the anchor location.

5.3.7 List public safety provisions.

5.3.8 Describe the accident response plan and list the outside rescue service and the procedure for contacting.

5.4 Before starting work, the Rope Access Supervisor shall complete a Job Hazard Analysis (JHA). In particular, attention shall be given to the following aspects.

5.4.1 Ability of the suspended person to safely use materials, equipment or tools necessary for the work and whether the reaction from any equipment or tool may place the person at risk.

5.4.2 Whether the work may loosen material which could become a hazard to the worker or others.

5.4.3 Whether the time required for the work at any one location will be such that there may be unacceptable levels of risk.

5.4.4 Whether it would be possible to quickly rescue workers that are using rope access techniques from any position they could be expected to enter.

5.5 The Rope Access Supervisor shall ensure that anchors have been evaluated in order to ensure that overall system safety is adequate.

5.6 Each rope access worker shall use a fall arrest system meeting the fall protection regulations or standards of the jurisdiction or country of the work; such as ANSI/ASSE, CSA or EN/CE.

5.6.1 *Safety, Secondary or Backup line(s) or other appropriate belay devices shall be used in addition to the main line unless the employer can demonstrate that the second line or other belay devices would create a greater hazard or otherwise would not be feasible.

5.6.2 The safety line used for fall arrest should have its own separate anchor and should be separately fixed to the worker's harness. This does not preclude both lines being attached to a single harness attachment point.

5.7 Each rope access worker shall use a fall arrest system meeting the fall protection regulations or standards of the jurisdiction or country of the work; such as ANSI/ASSE, CSA or EN/CE.

5.7.1 *Safety, Secondary or Backup line(s) or other appropriate belay devices shall be used in addition to the main line unless the employer can demonstrate that the second line or other belay devices would create a greater hazard or otherwise would not be feasible.

5.7.2 The safety line used for fall arrest should have its own separate anchor and should be separately fixed to the worker's harness. This does not preclude both lines being attached to a single harness attachment point.

5.8 Components used in any system shall be compatible.

5.9 Any equipment chosen to support a person at height should be such that it cannot be accidentally removed, dislodged or become unfastened from the rope while a person is suspended from it.

5.10 Harness performance and construction should comply with relevant, nationally recognized standards such as NFPA, UIAA, ANSI, ASTM.

5.11 Carabiners and similar connectors with screw-gates or self-locking methods of closure are the only types that can provide the required level of security for this type of work. If used to clip onto steel cable, shackles or eye bolts, they should be constructed of steel or other suitably hard metals. Those that are to clip to any anchorage (e.g., hanger, eye bolts, or shackles) should be of such a design and size that they can rotate freely in them without hindrance and without loosening the anchorage. Minimum strength: 22 kN (5,000 lbs).

5.12 Descenders should give the user suitable control over the speed of descent and should not cause undue shock loads to the rope when braking. In addition they should not cause abrasion, plucking or stripping of the sheath under normal or expected use. They should be of a type that cannot become accidentally detached from the rope.

5.13 Rope grabs should be of a type that will not slip at a static load below 2.25 kN (550 lbs). Rope Grabs should be of a type that cannot be accidentally detached from the rope. Ascenders should be chosen so as to minimize the risk of damage to the rope when in use.

5.14 Ropes made from nylon or polyester will normally be the most suitable for rope access work. Ropes of other man-made materials might, however, be useful in specific situations. In such cases, great caution should be exercised in verifying their suitability for the work.

5.15 Static or Low Stretch Ropes shall normally be used for ascending and descending on rope. Static or Low Stretch Ropes shall be of a kernmantle construction compliant with Cordage Institute 1801 Low Stretch and Static Kernmantle Life Safety Rope, and have a minimum breaking strength sufficient to supply the user's desired calculated system safety factor. In no case shall the safety factor for a rope access system be less than 5:1.

5.16 Where a fall in excess of a factor .25 fall might occur, dynamic rope should normally be used in place of static or low stretch rope. Dynamic safety rope should be of a kernmantle construction compliant with UIAA/CE (or comparable) standards for single climbing ropes.

5.17 Webbing used shall have a minimum breaking strength of at least 17.5 kN (4,000 lbs) when new. High modulus fibers such as Spectra, Kevlar, Vectran and similar fibers with minimum elongation may break when subjected to shock loading and shall not be used where a shock load may be applied.

5.18 It is recommended that only equipment that has a current certificate of the safe working load or minimum breaking strength, or other certification as to reliability, should be used. A check should be made that all certificates are backed by either sample testing to failure, or proof testing on individual items, and a proven quality assurance program, in accordance with an appropriate standard. Equipment should be only used in the manner indicated by the manufacturer.

5.19 Employer shall demonstrate that all equipment is used, inspected and maintained in accordance with manufacturer's instructions. Provisions shall be made for the retirement of equipment as necessary.

5.20 Employer shall establish and monitor a procedure to ensure all items of equipment are inspected before each use.

5.21 Employer shall ensure that equipment is protected from damage during the course of its use.

5.22 An Access Zone shall be established.

5.23 Anchorages should normally be established outside the Access Zone so that the workers can don their harnesses and helmets and attach themselves to the working line(s) before entering into the Access zone.

5.24 Appropriate fall protection measures shall be used by any personnel entering the Access Zone.

5.25 A Hazard Zone shall be established and marked, blockaded or identified to warn rope access personnel and passers-by of hazards associated with the work being performed.

5.26 No one may enter the Hazard Zone unless they are wearing appropriate Personal Protective Equipment.

5.27 An effective communications system shall be established prior to beginning work and should remain effective for all the time that work is actively taking place.

5.28 Radio systems or hard-line communications equipment should be used for communication purposes unless the area of work is such that all those involved are always visible to each other and within audible range.

5.29 A suspended temporary work platform should be utilized if the work is such that the Rope Access Technician may become overtired or suffer restriction to their blood flow.

5.30 When such platforms are used in conjunction with rope access methods, the anchorages for the platform should be totally independent from anchors used by Rope Access Technicians as main lines or safety lines.

5.31 Alternatively, support could be provided for the Rope Access Technician by a comfort seat or strap incorporated into the harness system. This should be fitted in a manner that it does not detract from the harness being the primary means of safety.

5.32 All tools and equipment must be suitable for the work intended and compatible with rope access work. In particular, they shall not present a danger to the safe operation or integrity of the rope access system.

5.33 Where the workers carry tools and equipment, appropriate steps shall be taken to prevent them from falling or being dropped.

5.34 All electrical equipment, plugs, sockets, couplers, leads, etc. should be suitable for the environment in which they will be used.

5.35 Power tools weighing more than 22 Lbs should be fitted with a separate suspension system secured to an independent anchorage. Anchorages and suspension ropes used for equipment should be clearly identified to avoid confusion with those used to support persons.

5.36 Moving parts of tools should be kept clear of the operator, power leads and the suspension equipment.

5.37 Any power tools that could cause injury to the users or access equipment shall be fitted with an automatic shut off switch that will interrupt the power and stop movement in the event of a mistake, accident, or emergency.

5.38 The employer shall have a rescue plan for every rope access work site or project. The plan shall provide for the prompt rescue and safe extrication of a sick, injured or entangled worker. The plan shall include the following provisions.

5.39 The plan shall ensure that all persons conducting rope access work have been trained and competent to perform self-rescue.

5.40 The plan shall ensure that sufficient rope access personnel trained and competent in partner rescue are present and available to perform a rescue in a manner appropriate for the mechanism of injury or the patient's medical condition.

5.41 The plan shall ensure that the supervisor is capable of managing a rescue incident and where appropriate, performing a rescue.

5.42 The plan shall include the information required to respond the appropriate emergency services.

5.43 Retrieval systems or methods shall be available on-site whenever a rope access worker is on-rope, unless use of the retrieval equipment would increase the overall risk of the rope access work, or would not contribute to the rescue of the rope access worker.

5.44 Retrieval procedures using retrieval systems should be practiced at regular intervals and before the start of any work at situations that are unfamiliar to the work team.

References:

- APX-019A **Safety Training Matrix**
- **SPRAT Safe Work Practices for Rope Access Work**
- **SPRAT Requirements for Rope Access Work**

AERIAL LIFTS

1.0 Scope:

This procedure covers the safe use of Aerial and Scissor Lifts.

2.0 Training Requirement

2.1 Trained and Authorized employees must receive training utilizing aerial and scissor lifts. Training shall consist of the nature of aerial lift hazards in the work site, and, as applicable, the correct procedures for construction use.

2.2 Field proficiency demonstration must be conducted annually utilizing Pronto Field Knowledge Assessment administered by the Safety Risk Manager or Safety Coordinator. (Reference **APX-019A Safety Training Matrix**).

3.0 Aerial Lift Procedure:

3.1 Before use, all operators are to test lift controls, identify and check the operation of emergency controls and generally inspect the unit to ensure safe working order.

3.2 Personal fall restraint system (adjustable restraint lanyards) is required to be used at all times while in aerial personnel lifts (knuckle-boom, articulating boom).

3.3 Guardrail systems are to remain in place at all times while personnel are on / in the work platform.

3.4 All work from such units should occur with both feet on the floor of the work platform.

3.5 Safety chains/gates are to be engaged / latched while lifts are occupied. Any equipment provided without chains/ gates must not be used until repaired.

3.6 Articulating boom and extendible boom platforms, primarily designed as personnel carriers, must have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

References:

- Applicable Manufacturer Manuals
- APX-019A **Safety Training Matrix**

START UP SAFETY CHECKLIST

It is the intent of the Company to conduct business in a safe and consistent manner. The HR & Safety department has created this checklist to aid in the startup process of a new project and/or the operation of a service vehicle.

The following, including safety manuals and equipment, project documentation and other standard operating procedures, are mandatory for all projects and service vehicles.

1) Safety Policies & Procedures Manual
2) Employee Hand Book
3) Hazardous Communications (HAZ COM) Manual
4) Haz Com Jobsite List of Chemicals
5) Current CFR 1926 Manual or electronic access
6) Postings (must be displayed in a conspicuous location that employees access on a regular basis (i.e., job trailer, lunch area, meeting area, gang box, etc.)

● OSHA Poster	● EEO Policy Statement
● State Payday Law	● Sexual Harassment Policy
● Required Workers' Compensation Coverage	● Substance Abuse, Weapons and Prohibited Items Policy
● Notice to Employees Concerning Workers' Compensation in Texas	● Emergency Phone Numbers
● First Aid Log	● OSHA 300 Log (from Feb 1 through April 30)

7) Nearest Company-approved clinic should be contacted and address and phone number posted along with a map to its location
8) Unsafe Act/Unsafe Condition Form
9) First Aid and BBP Kit
10) Fire Extinguishers
11) Potable drinking water
12) Accident/Incident Investigation Form
13) Witness Statement Form
14) Auto Incident Investigation Form
15) Job Site Orientation (Must be completed with ALL employees on site)
16) Lockout procedures and equipment
17) Evacuation Plan
18) Safety Meeting book

Each person should be made aware of the SDS book location and how to use the manual. The postings will be posted in a regular meeting place on every project. If the regular meeting place is a service vehicle, we will provide the postings in a notebook, however, every employee must be aware of its location.

JOB SAFETY PLAN

I. JOB INFORMATION

A. General Information *(add job name)*

B. Company Contact Information Emergency: *(add Project Manager & Jobsite Foreman info)*

Jaime Villarreal – *Claims Manager* – (832) 256-9566
Cory Bruner – *Director of Risk* - (512) 440-7985 Ext. 12160

Medical Facility: (*Name, address, phone number, Obtain from Jaime Villarreal)*

General Contacts (Home Office):

Jaime Villarreal – Claims Manager – (832)-256-9566
Cory Bruner – Director of Risk - (512) 440-7985- Ext. 12160

Competent Persons:

The competent safety person for Facility Solutions Group ("FSG") for this project is Jaime Villarreal. He has received training in regards to our corporate safety program, CalOSHA standards for construction, and has reviewed the facility safety program and requirements.

C. General Scope of Work

Provide a complete retrofit of lighting system as per the contract documents and site specific scope.

D. Commitment to Safety

FSG and its employees are dedicated to a safe work environment. Each employee is held accountable for their actions, and their jobs depend on a safe work record. Each foreman conducts a weekly safety meeting at their jobsite. These meetings include general safety topics as well as issues specific to the job. The safety manager and or safety coordinators also conduct periodic hazard surveys to help avoid unsafe conditions and practices. FSG's Safety Manual is present and available to employees at the site, it thoroughly explains what is expected of each employee and addresses proper procedures in personal protective equipment (PPE), what to do in case of an accident, how to respond to the discovery of hazardous material, and other responses to, and prevention of hazardous conditions.

II. SAFETY RELATED PROGRAMS

A. Tool Box Talks:

All FSG employees onsite will be required to attend a weekly safety meeting. A relevant safety topic will be discussed. All new tasks to be performed that require additional safety measures beyond Facility Solution Groups Corporate Safety program will be discussed, and a JHA will be completed. A copy will be forwarded to the facility safety team upon request.

B. Evacuation Plan:

In the event of an evacuation, all FSG employees will exit the site and meet at a designated assembly point. All new employees will be informed on this evacuation procedure prior to starting work. There will be an evacuation plan and map posted in our jobsite trailer or job box, as well as, emergency contact information. The company has designated emergency contacts in Section I.B.

Emergencies and incidents involving an employee are thoroughly investigated and documented in accordance with the company's Safety Manual and related forms. In the event of a more severe, wide-spread emergency, the Director of Risk is in charge of any emergency matters, its investigation, and action relating to the specific circumstances. Wherever possible, severe weather or other catastrophic conditions are managed and investigated with government and client representatives to allow an appropriate assessment, response, and communication of any applicable issues. In the event of a serious project catastrophe, or emergency, all employees at the project are to gather and report to the designated FSG assemble point.

C. Hazardous Material:

During the project, FSG will be monitoring any chemicals or hazardous materials that may be used. A Safety Data Sheet will be kept on site and a copy will be submitted to the facility owner upon request for every chemical and hazardous material FSG anticipates bringing onto the jobsite.

D. Lockout / Tag-out:

Lockout / Tag-out will be strictly adhered to in accordance with the FSG Electric Lockout / Tag-out Program. A lockout kit will be present on the job site for the duration of the project. Locks and keys will be issued out to employees who have been trained in Lockout / Tag-out and are the employees who are performing the tasks. All employees involved in the task will place a lock on the appropriate device.

E. No Live Work:

Facility Solutions Group, Inc. has a strict "no live work" policy. This policy is designed to provide a safe working environment for everyone on the jobsite. The policy conforms to OSHA and NFPA 70E standards. [NFPA 70E: 130.2 Live parts to which an employee might be exposed shall be put into an electrically safe work condition before an employee works on or near them, unless the employer can

demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations.] If FSG cannot demonstrate that de-energizing any or all electrical services introduces additional or increased hazards, we will implement a strict "No Live Work" policy.

F. Safety Training:

All FSG employees are put through a new hire safety orientation upon hire. All employees obtain a 10 hour OSHA training card within sixty days of employment. Continuous safety communications and training updates are conducted to keep employees current with safety issues and knowledge. All new employees to this project will attend a site-specific safety training orientation to review site specific requirement and this site specific injury and illness prevention plan.

G. Ladders:

All FSG employees are trained in proper ladder usage. This will include the recognition of damage or defects associated with ladders. Inspections will be done daily and any damaged equipment will be taken out of service, tagged "do not use" and removed from the project immediately. Any work at heights greater then 4' will require 100% tie off to an approved anchorage.

H. Personal Protective Equipment (PPE):

All FSG employees will be provided a hard hat, safety glasses and gloves. This PPE will be worn at all times when on site. Before using a safety harness the employee will be trained on proper usage. If working in a high noise area, the employee will be required to wear hearing protection. All other personal protective equipment that may be used on site will be assessed utilizing a JHA and provided on an as needed basis.

I. First Aid Kits, Fire Extinguishers, and Hand Cleaner:

There will be a first aid kit and fire extinguisher at the job trailer and or job box, as well as, on each floor FSG is working on. All employees will be notified of the location of the first aid kit and fire extinguisher when they first arrive on site. Hand cl.eaner, paper towels, and a trash receptacle is located at the job meeting area for employees to use.

J. Drinking Water:

Clean drinking water will be provided to FSG employees as needed. All drinking water will have separate disposable cups and a trash receptacle for the waste. It is the responsibility of the on site competent person to ensure the water cooler is full and there are cups available at all times.

K. Housekeeping:

FSG Employees will clean up their work areas daily or when completing a specific task prior to moving to a different area.

L. Working at Heights:

Any rooftop where there is no guardrail or parapet at least 39" in height will require controlled roof access procedure to be implemented and enforced. There will be a roped and flagged pathway leading from the roof access panel to the area of work a perimeter will be set no closer than twenty five (25) feet from the edges of the building with a rope height of approximately forty two (42) inches. This access will be monitored by a sign in sheet. If a roped off control is not used then it will be permissible to complete the work by having 100% tie off to the structure. Any work conducted at a height of 4' or greater will require 100% tie off to an approved anchorage point. When working from aerial lifts FSG employees will be required to use 100% tie off to an approved anchorage.

M. Disciplinary

Employees observed behaving in an unsafe manner shall be advised of the incorrect behavior, involved in identifying corrective measures, and given an opportunity to correct their behavior. If they do not make satisfactory changes within an allotted time frame, or, if the behavior constitutes an Immediately Dangerous to Life & Health (IDLH) action, disciplinary procedures shall be initiated.

Branch Managers, Supervisors, SRM and the DRM are responsible for monitoring and ensuring that a safe work environment exists and that employees engage in safe-work practices. Offenses shall merit the application of some or all of the actions below.

- Verbal warning,
- Written warning,
- Suspension or,
- Immediate Termination.

N. Postings

All postings will be on a bulletin board in the jobsite trailer or job box. The required items to be posted are detailed below:

- Cal/OSHA Poster
- Notice of Workers Compensation
- Insurance Coverage
- Pay Day Notice
- Emergency phone numbers and location of hospital
- Notice to employees of unemployment and disability insurance
- Industrial Welfare Commission
- Orders regulating wages, hours and working conditions
- Discrimination in employment prohibited by law
- Any other required labor law posters

PROGRESSIVE DISCIPLINE REPORT

Employee Name : _____ Employee Number: _____

Division:_____ Location:Department:_____

Probationary Employee? ☐ Yes ☐ No

Action to be taken: ☐ Documented Verbal Warning ☐ Warning ☐ Probation* ☐ Suspension ☐ Dismissal

*If Probation: Probation Start Date: _____ Probation End Date: _____

Note - This report will be made a part of the official record of the above mentioned employee.

Nature of the incident:

☐ Rudeness to employees or customers
☐ Unexcused Absence
☐ Tardiness
☐ Drinking while on duty
☐ Sexual or other harassment
☐ Dishonesty
☐ Failure to follow instruction
☐ Defective/Improper / Substandard work
☐ Theft
☐ Excessive personal calls / personal business during work
☐ Housekeeping violation
☐ Improper conduct
☐ Violation of safety rule: _____
Stand and Deliver Required: ☐ YES ☐ NO
☐ Insubordination
☐ Violation of drug policy
☐ Destruction of company property
☐ Fighting on company premises
☐ Leaving without permission

☐ Violation of company policies/procedures regarding: _____

☐ Other: _____

Offense Number: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Date of last offense:

Consequence should offense occur again: ☐ Warning ☐ Probation ☐ Suspension ☐ Dismissal

Witnesses: _____

Supervisor's remarks & detailed description of offense: _____

_____

_____

Employee's remarks: ☐ I agree with the Employer's statement
☐ I disagree with the Employer's statement for the reasons below:

_____

_____

Other comments: _____

_____

_____

JOBSITE SAFETY - TEMP EMPLOYEE

Jobsite: _____ Job No.: _____ Supervisor: _____

Address: _____

Project Manager: _____

1) Safety meetings will be held as follows unless otherwise rescheduled by your project Supervisor
2) Hard hats, safety glasses, work boots and proper work clothes are to be worn at all times while on a Company project. Ear protection is required in high noise areas (85 dB or above). You are expected to utilize proper PPE while working on any FSG project.
3) All injuries, incidents, near misses and unsafe conditions are to be reported to the Supervisor Immediately.
4) You are NEVER to work in an UNSAFE condition.
5) Know "Your Right to Know" and be familiar with the location of the Hazardous Communications Manual.
6) We work together as a TEAM. Never be afraid to ask questions.
7) Familiarize yourself with the location(s) of first-aid stations.
8) Parking shall only be allowed at the following location(s):
9) Possessing and maintaining a complete set of required hand tools is mandatory for your ability to perform your job safely and effectively.
10) You are expected to use the correct tool for the specific job being performed.
11) All new employees are to become familiar with working conditions and potential hazards.
12) Follow all housekeeping guidelines and policies as required by FSG and the Customer.
13) It is a job requirement to properly care for and maintain company tools.
14) Failure to abide by the rules and regulations and/or the project rules will result in Disciplinary action. I have read, and I understand the rules and regulations of this project orientation. I also understand that they are a part of my job description and I am responsible for my own actions.
15) By signing this form you are acknowledging that you have reviewed it and understand it in its entirety. Inform the Supervisor if you would like to request additional information on a specific product or procedure in an effort to prevent any unsafe working conditions that might arise.

Project Specific Requirements: _____

Additional Comments: _____

Signature: _____ Printed Name: _____

Employee #: _____ Date: _____

Person Conducting Orientation *(print name)*: _____

JOBSITE SAFETY - FSG EMPLOYEE

Jobsite: _____ Supervisor: _____

Address: _____

Project Manager: _____

Remember who our customer is, work as a **TEAM**. Never be afraid to ask questions.

1) Parking is allowed in:
2) Having and maintaining a complete set of required hand tools is mandatory for your job.
3) You are expected to use the right tool for the job.
4) Familiarize new employee with working conditions.
5) Housekeeping guidelines.
6) Location of first-aid stations.
7) Hard hats, safety glasses, work boots and proper work clothes are to be worn at all times while on a Company project. Ear protection is required in high noise areas (85 dB or above).
8) You are **NEVER** to work in an **UNSAFE** condition.
9.) Safety meetings will be on: _____ at _____

    They will be held in: _____ **ATTENDANCE is MANDATORY**.
10) It is a job requirement to properly care for and maintain company tools. You are also expected to utilize proper PPE while working on a Company project.
11) All injuries, incidents, near misses and unsafe conditions are to be reported to the Supervisor Immediately.
12) Know "**Your Right to Know**" and the location of the Hazardous Communications Manual. By signing this form you are acknowledging that you have reviewed it. Inform the Supervisor if you want information on a specific product so he/she is able to prevent any unsafe working conditions that might arise.
13) Failure to abide by the rules and regulations as outlined in the Company Policy and Procedures Manual and/or the project rules will result in Disciplinary action. I have read, and I understand the rules and regulations of this project orientation. I also understand that they are a part of my job description and I am responsible for my own actions.

Project Specific Requirements: _____

Signature: _____

Employee #: _____ Date: _____

Person Conducting Orientation *(Please Print)*: _____

JOB HAZARD ANALYSIS

Job or Task Description:	Page ____ of ____ JHA NUM:	Date:	☐ New ☐ Revised
Department:	Supervisor:	Employee(s) Observed:	
Location:	JHA Conducted By:	JHA Approved by (Safety):	
Required and/or Recommended PPE:			

Sequence of Basic Task Steps	Potential Hazards or Possible Unsafe Acts or Conditions	Recommended Action or Procedure

Employee Signatures:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

EMPLOYEE'S FIRST REPORT OF INJURY OR ILLNESS

1. Name: (*Last, First, M.I.*)			2. Sex: ☐ F ☐ M
3. Social Security Number:	4. Home Phone Number:	5. Date of Birth: (*M-D-Y*)	
6. Does the Employee Speak English? *(If No, Specify Language)* ☐ YES ☐ NO Language:			
7. Race: ☐ White ☐ Black ☐ Asian	8. Ethnicity: ☐ Hispanic ☐ Native American ☐ Other		
9. Mailing Address Street or P.O. Box: Address: City: State: Zip: Country:			
10. Marital Status: ☐ Married ☐ Widowed ☐ Separated ☐ Single ☐ Divorced			
10 (a). Did the employee refuse treatment? ☐ Yes ☐ No *If Yes, the "Offer of Medical treatment Declined" must be filled out and sent in along with the Employees First Report of Injury or Illness to the Safety Officer.*			
11. # of Dependent Children:	12. Spouse's Name:		
13. Doctor's Name:			
14. Doctor's Mailing Address: Address: City: State: Zip:			

15. Date of Injury: (M-D-Y)	16. Time of Injury: ☐ F ☐ M	17. Date lost time began:	
18. Nature of Injury:	19. Part of body injured or exposed:		
20. How and Why Injury/Illness Occurred			
21. Was employee doing their regular job?: ☐ Yes ☐ No	22. Worksite Location of Injury (stairs, dock, etc.)		
23. Where did Injury or Exposure Occur? (Address or Name of Business) Address:			
City:	State:	Zip:	Country:
24. Cause of Injury (fall, tool, machine, etc.)			
25. List Witnesses:			
26. Return to Work Date/ expected (m-d-y):	27. Did the employee die?: ☐ Yes ☐ No	28. Supervisor's Name:	29. Date Reported:

30. Date of Hire: (m-d-y)	31. Was the employee hired or recruited in TX? ☐ Yes ☐ No	32. Length of service in current position: Months: Years:	33. Length of service in current occupation: Months: Years:
34. Employee Payroll Classification Code:		35. Occupation of Injured Worker:	

36. Name and Title of Person Completing Form:			35. Name of Business: **Facility Solutions Group**	
Business Mailing Address and Telephone Number Address:	Telephone:		Business Location (if different from mailing address) Address:	
City:	State:	Zip:	City:	State: Zip:
Worker's Compensation Insurance Company **Travelers**			Policy Number **N/A**	

DECLINATION OF TREATMENT

I, _____ , declined medical treatment on this date of _____ for an
(Employee Name)

incident that occurred on the date of _____ .

Please explain Incident: _____

_____

_____

_____

_____

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_____

_____ Date _____
Signature of Employee

_____ Date _____
Signature of Supervisor

INCIDENT/ACCIDENT INVESTIGATION & ROOT CAUSE ANALYSIS

PLEASE PRINT ALL INFORMATION

Instructions: Use this form to document accidents resulting in an injury or illness, vehicle and equipment accidents, public and private road incidents, events involving third parties, property damage and near miss events. Use the "Root Causation Analysis" to identify work tasks, potential hazards and control methods.

INCIDENT REPORT

WHEN TO COMPLETE THIS FORM AND TURN IT IN TO THE BRANCH MANAGER

- Jobsite and Non-Jobsite Incident With or Without Injuries.
- Property Damage to Property Belonging to Others or FSG.
- Jobsite Equipment Failure.

INSTRUCTIONS FOR FORM COMPLETION AND PROCESSING

- The FRONT and BACK of this form must be completed with as much information as is available.
- A copy of the form must be faxed or emailed to FSG Claims Department in Austin, TX within 24 hrs of the incident.
- Email: jaimev@fsgi.com FAX # (888) 204-1504.
- The original report should be filed in your local branch Incident Report records.

GENERAL INFORMATION ABOUT THE INCIDENT:

Date:	Incident Time: ☐ AM ☐ PM	Branch:
Address / Location of Incident:	City	State:

DESCRIPTION OF INCIDENT

INCIDENT INFORMATION *(Complete all information that applies to the incident.)*

FSG Employee/Driver (Your Name):	Home Address	Home/Cell Phone:
Vehicle Number:	Year/Make/Model:	Last 4 digits of VIN#:
Contractor/Customer: *(who you are working for)*		Contractor/Customer Phone Number:

Signature of Employee making Report:	Signature of Safety Manager:

PROPERTY DAMAGE

Was there property damage?	Other Vehicle/Property Insurance?	Insurance Company / Policy Number:
Describe Property:		If Auto: Note Year, Make, Model, Plate Number:
Police Response?	Agency:	Report Number:
Owner's Name:	Owner's Address:	Owner's Phone Number:

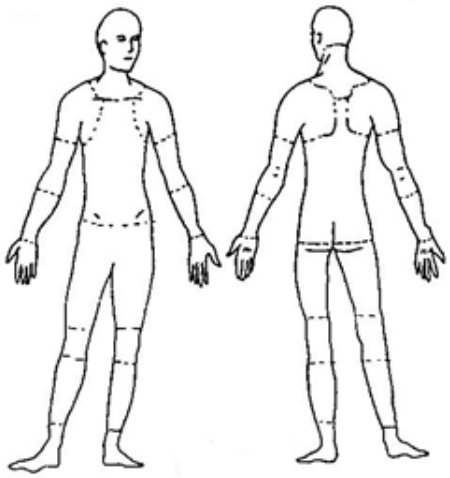
OTHER PROPERTY DAMAGE

Other Driver's Name:	Other Driver's Address:
Describe Damage:	
Where can damage be seen?:	Is vehicle drivable? ☐ Yes ☐ No

IS ANYONE INJURED?

Name:	Phone:	Age:	Extent of Injuries:

DIAGRAM/SKETCH

Injury Incident: Part of body affected: (shade all that apply)	Auto/Property Incident:
	

WITNESS INFORMATION

Name:	Address:	Phone:

ROOT CAUSE ANALYSIS

Mark 'yes' or 'no' for all applicable questions, completing Comments and Recommended Action portions when marking 'yes'. Sample recommended action **topics** include, **but are not limited to:** re-training or new training, new/more equipment, new processes, responsibility assignments, re-do or new risk assessments, staffing sizes, work assignment loads, etc. Break the topic down into action items you feel will correct this incident from recurrence.

Mark as Applicable	Causal Factors	Comments	Recommended Action
PART 1: EQUIPMENT Was equipment/tools/materials a contributing factor? ☐yes ☐no Proceed to Part 1			
☐ yes ☐ no ☐ yes ☐ no ☐ yes ☐ no	1.1 Did equipment/tool **defects** contribute? If NO, goto 1.2 1.1.1 Was there an equipment/tool inspection process? 1.1.2 Was the inspection process completed as required?		
☐ yes ☐ no	1.2 Was the **correct** equipment/tool/material utilized? If no, go to 1.3. If yes, go to 1.6		
☐ yes ☐ no	1.3 Was the correct equipment/tool/material **readily** available?		
☐ yes ☐ no	1.4 Did the employee **know** where to obtain the correct equipment/tool/material?		
☐ yes ☐ no	1.5 Was **substitute** equipment/tools/material **used** in place of correct ones?		
	1.6 List other equipment/tool/material causal factors.		
PART 2 WORK ENVIRONMENT Was the location of equipment/material/employee(s) a contributing factor? ☐yes ☐no Proceed to Part 2			
☐ yes ☐ no	2.1 Did the location/position of equipment/material/ employees contribute to the incident?		
☐ yes ☐ no	2.2 Was the hazardous scenario recognized by the employee?		
☐ yes ☐ no	2.3 Was the employee supposed to be in the vicinity of the equipment/material?		
☐ yes ☐ no	2.4 Was the hazardous scenario visible to the employee?		
☐ yes ☐ no	2.5 Was there sufficient space to conduct work activities?		
☐ yes ☐ no	2.6 Were there any contributing environmental conditions? (noise levels, temperature, illumination, ventilation)		
	2.7 List other work environment causal factors.		
PART 3 EMPLOYEE Were the work activities conducted by the employee a contributing factor? ☐yes ☐no Proceed to Part 3			
☐ yes ☐ no ☐ yes ☐ no ☐ yes ☐ no ☐ yes ☐ no	3.1 Was there a written task/risk assessment or known rule for this work? If no, go to 3.2 3.1.1 If yes, did this assessment/rule **anticipate** the incident? 3.1.2 If yes, did the employee **know** the proper procedure? 3.1.3 If yes, did the employee **deviate**?		
☐ yes ☐ no	3.2 Was the employee mentally and physically capable of performing the work?		
☐ yes ☐ no ☐ yes ☐ no ☐ yes ☐ no ☐ yes ☐ no	3.3 Was there a **lack** of required PPE utilization? If no, go to 3.3. 3.3.1 If yes, was appropriate PPE **available**? 3.3.2 If yes, did the employee **know** the PPE was required? 3.3.3 If yes, did the employee **know** how to use it?		
☐ yes ☐ no	3.4 Was available PPE **used properly**?		
☐ yes ☐ no	3.5 Was the PPE **adequate**?		
	3.5 List other employee causal factors.		
PART 4 SUPERVISION Was the supervisory system a contributing factor? ☐yes ☐no Proceed to Part 4			
☐ yes ☐ no	4.1 Was there a failure by supervision to **detect** a hazardous condition, deviation from safety policy or infrequently performed task?		
☐ yes ☐ no	4.2 Was there a failure by supervision to **take corrective action** for a **known** hazardous condition, deviation from safety policy or infrequently performed task?		
☐ yes ☐ no	4.3 Was supervisory **responsibility** for accident detection and prevention adequately defined and understood?		
☐ yes ☐ no	4.4 Was **supervision adequately trained** to fulfill assigned responsibility for accident detection and prevention?		
	4.5 List other management/supervisory casual factors.		

INTERNAL USE ONLY

☐ Faxed or Email Report to Safety Department: Email: jaime.villarreal@fsgi.com Fax: 1-888-204-1504	☐ Call Cory Bruner: 512-440-7985 ext. 12160 Cell Phone: 512-230-4491
☐ Original Report in Branch file	Photos taken of Scene/Claimant/Property Damage: ☐ Yes ☐ No

WITNESS REPORT

PLEASE PRINT ALL INFORMATION

Name of witness: _____ Phone No.: _____

Address: _____
Street City State Zip

Name of Job: _____

Job Title: _____

Exact Location of Incident: _____

Name of employee(s) involved in incident: _____

Detailed description of incident: _____

_____

_____

_____

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Signature of Witness: _____ Date: _____

Signature of Supervisor: _____ Date: _____

Note: Return to Office immediately following incident.

DRIVER EVALUATION

Driver: _____ Unit#: _____

Place an "A" in each box for acceptable. Place a "U" in each box for Unacceptable.

LEFT TURNS	1	2
Approach		
Traffic check		
Signal, decel, coast, lane		
If Stop		
Necessary, gap, stop line		
Full stop		
Turning		
Traffic check		
Both hands, gears		
Speed, wide/short		
Complete Turn		
Traffic check		
Correct lane		
Cancel signal, accelerate		

RIGHT TURNS	1	2
Approach		
Traffic check		
Signal, decal, coast, lane		
If Stop		
Necessary, gap, stop line		
Full stop		
Turning		
Traffic check		
Both hands, gears		
Speed, wide/short		
Complete Turn		
Traffic check		
Correct lane		
Cancel signal, accelerate		

STOPPING	1	2
Traffic check		
Deceleration, coast		
Gap, stop line, full stop		

INTERSECTIONS	1	2
Traffic check		
Yield		
Gears, accelerate		

URBAN/RURAL STRAIGHT DRIVE(S)	U	R
Regular traffic checks		
Keeps vehicle in lane		
Speed, spacing		

LANE CHANGES	L	R
Traffic check		
Signal		
Space		
Smooth change		
Cancel signal		

BRIDGE/UNDERPASS	1	2
Knew weight/clearance		

DRIVE UP/DOWN GRADE	U	D
Proper gear		
Traffic checks		
Steady speed		

STOP/START ON GRADE	1	2
Approach		
Traffic check		
Signal on		
Stop		
Position, not roll		
Cancel signal, four-ways on		
Parking brake on		
Resume		
Traffic check		
Four-ways off, signal on		
Parking brake		
Not stall engine		
Accelerate, cancel signal		

CURVE	1	2
Speed: enter, through		
Stay in lane		
Traffic checks		

RAILROAD CROSSING	1	2
Traffic		
Law, stop		
Gears		

FREEWAY	1	2
Merge On		
Traffic check		
Signal		
Merge		
Cancel signal		
Driving		
Traffic check		
Spacing		
Lane		
Speed		
Exit		
Traffic check		
Signal		
Smooth, decal, ramp speed		
Spacing		
Cancel signal		

GENERAL DRIVING BEHAVIORS	1	2
Uses clutch improperly		
Uses gears improperly		
Uses brakes improperly		
Improper steering		
Lane of travel		
Crosswalk/stop line		

Road Test Score

Disqualifying Scores:

Manual ☐ 25 or more
Automatic ☐ 18 or more

Immediate Disqualifications:

Seatbelt violation ☐
Accident ☐
Dangerous action ☐
Puts vehicle over curb ☐
Violation of law ☐
Fails to perform ☐

Road Test Score: ☐

☐ Pass
☐ Disqualify

Tester's Signature:	Date:

BASIC CONTROLS	1	2
Pull-ups		
Encroachments		
Position (2')		
Signals/warning devices		
Mirror check		

JOBSITE MANEUVERING	1	2
Pull-ups		
Encroachments		
Position (2')		
Signals/warning device		
Mirror check		

Basic Controls Score

Disqualifying Scores:

All ☐ 9 or more

Immediate Disqualifications:

Seatbelt violation ☐
Fails to perform ☐

Road Test Score: ☐

☐ Pass
☐ Disqualify

Tester's Signature:	Date:

Driver's Signature:	Date:

NEAR MISS REPORT

Person completing report: _____ Phone No.: _____

Address: _____
Street *City* *State* *Zip*

Name of Job: _____

Job Title: _____

Exact Location of Near Miss: _____

Date of Near Miss: _____

Name of employee(s) involved in incident: _____ _____ _____

_____ _____ _____ _____

Detailed description of incident: _____

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Signature Person Completing Report: _____ Date: _____

Signature of Supervisor: _____ Date: _____

Note: Return to Office immediately following incident.

MEMO

TO: ALL FSG SAFETY COORDINATORS
FROM: SAFETY DEPARTMENT
DATE: 1/27/2017

SUBJECT: INJURY PROTOCOL

Listed below is an outline of the appropriate Protocol for employee First Aid and clinics that treat our employee's that should be followed. Remember the clinic works for FSG, as such, must communicate and follow our Protocol whenever possible. **Whenever a clinic is set-up three contacts will be provided for verbal authorization to treat.**

INJURIES BEYOND FIRST AID:

1) Make sure all employees go to either an FSG approved clinic or Travelers approved clinic when and wherever possible.
2) Advise the clinic to use over the counter medications when possible; not to prescribe OTC medication, make sure the Protocol states to Notify FSG so we can provide the proper OTC Medication.
3) "Light Duty" vs. "Restricted Duty" clinic should know the difference- both should be communicated verbally to the employee and FSG contact, not prescribed.
4) Company provides "Light Duty" for all employees-should be communicated through verbal communication with employee and FSG contact, not prescribed.
5) Minor injuries should not be a recordable.
6) Claims Administrator will work closely with Doctors- through verbal communication.
7) All puncture wounds require tetanus shot (non-recordable).
8) Any liquid adhesive should not be classified as liquid stitch or surgical glue but as Liquid Band Aid. (non-recordable).
9) All electrical shock requires EKG (non-recordable)
10) In event an immobilizer is recommended-classify as for support only (non-recordable)
11) Any overnight stay at hospital should be classified as for observation if no treatment. (non-recordable)
12) If employee is exposed to a chemical send the proper SDS along with the employee to the clinic for treatment.
13) All physical therapy should be discussed with Claims Administrator.

CONTROL SWELLING WITH "R.I.C.E." THERAPY:

1) **R**est the sprained or strained area. If necessary, use a sling for an arm injury or crutches for a leg or foot injury. Splint an injured finger or toe by taping it to an adjacent finger or toe.

2) **I**ce for 20 minutes every hour. Never put ice directly against the skin or it may damage the skin. Use a thin towel for protection.

3) **C**ompress by wrapping an elastic (Ace) bandage or sleeve lightly (not tightly) around the joint or limb. Specialized braces, such as for the ankle, can work better than an elastic bandage for removing the swelling.

4) **E**levate the area above heart level if possible.

5) Manage Pain and Inflammation; give an over-the-counter NSAID (non-steroidal anti-inflammatory drug) like ibuprofen (Advil, Motrin), acetaminophen (Tylenol), or aspirin. Do not give aspirin to anyone under age 19.

SEE A DOCTOR WHEN:

All but the most minor strains and sprains should be evaluated by a doctor. Consult a doctor as soon as possible if there are symptoms of a possible broken bone:

1) There is a "popping" sound with the injury.
2) The person can't move the injured joint or limb.
3) The limb buckles when the injured joint is used.
4) There is numbness.
5) There is significant swelling, pain, fever, or open cuts.

FOLLOW UP:

1) **Continue to try RICE for 24 to 48 hours**. If problems persist with no relief or injury gets worse have the employee see a doctor.

2) The doctor may want to do X-rays or an MRI to diagnose a severe sprain or strain or rule out a broken bone.

3) The doctor may need to immobilize the limb or joint with a splint, cast, or other device until healing is complete. Physical therapy can often be helpful to bring an injured joint back to normal.

4) In severe cases, surgery may be needed.

First Aid vs. Treatments

1) Using a nonprescription medication at nonprescription strength (First Aid)(For medications available in both prescription and nonprescription form, a recommendation by a physician or other licensed health care professional to use a nonprescription medication at prescription strength is considered medical treatment for record-keeping purposes)

2) Administering tetanus immunizations. (First Aid) (Other immunizations, such as Hepatitis B vaccine or rabies vaccine, are considered medical treatment.)

3) Cleaning, flushing or soaking wounds on the surface of the skin (First Aid).

4) Using wound coverings such as bandages, Band-Aids, Liquid Band Aid, gauze pads, or using butterfly bandages or Steri-Strips (First Aid) (Other wound closing devices such as sutures and staples are considered medical treatment)

5) Using hot or cold therapy (First Aid).
6) Using any nonridged means of support, such as elastic bandages, wraps or nonridged back belts (First Aid) (Devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for record-keeping purposes)
7) Using temporary immobilization devices while transporting an accident victim (First Aid) (e.g., splints, slings, neck collars, back boards)
8) Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister (First Aid).
9) Using eye patches (First Aid).
10) Removing foreign bodies from the eye using only irrigation or a cotton swab (First Aid).
11) Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means (First Aid).
12) Using finger guards (First Aid).
13) Using massages (First Aid). (Physical therapy or chiropractic treatment is considered medical treatment for record-keeping purposes)
14) Drinking fluids for relief of heat stress (First Aid).

RETURN TO WORK

Employees Are Our Most Important Assets

FSG's Return-to-Work Program is based on the belief that there is nothing more important than our employees. When an employee loses time from his or her job or is unable to return to work, everyone loses.

The employee loses income, benefits and most importantly, self esteem, which is often closely tied to employment.

Our company loses a valuable employee.

Our Program

To meet our goal of enabling employees to return to productive employment as rapidly as possible, our company takes the following steps:

We will try to meet or talk with the treating provider at the employee's first medical appointment to discuss the physical demands of the employee's regular job or the demands of alternative temporary tasks. Every effort will be made to enable the employee to return to work either immediately or in the very near future.

We will contact the treating Physician on a regular basis to see if a partial/full release can be obtained or whether alternate tasks or additional hours of duty can be approved safely.

In order to create a win-win situation when an accident occurs, it stands to reason that the goal is to enable employees to return to work as quickly as medically possible and become productive as soon as possible after injury.

RETURN-TO-WORK POLICY STATEMENT

It is FSG's policy to make every reasonable effort to provide suitable alternative employment to an employee who is unable to perform his or her normal duties as a consequence of injury or illness.

Each department will attempt to accommodate employees who cannot perform the basic duties of their former positions. Where this is not possible, all departments will cooperate in meeting the company's policy of trying to locate suitable alternative employment.

Signature: _____ Date: _____

JOB HAZARD ANALYSIS (FOR ENERGIZED WORK)

Technician: _____ Location: _____

Job #: _____ Date: _____

ALL PERSONNEL TO BE INFORMED OF DAILY WORK SCOPE | NOTE: NOT ALL SPACES MAY BE NEEDED FOR A SPECIFIC TASK

☐ Yes ☐ No	Does the Job Involve Energized Work:	
☐ Yes ☐ No	If Yes, Complete Energized Worked Permit (EWP)	
☐ Yes ☐ No	Direct Or Indirect Contact (Tools, Meters, etc.) With Bare Energized Conductors > 50 Volts.	
☐ Yes ☐ No	Limited Approach Boundary Will Be Crossed Arc Flash Protection Boundary Will Be Crossed	
☐ Yes ☐ No	Will Job Require LO/TO?	What Will This Circuit Trip?

TASK DESCRIPTION	LIST KNOWN HAZARDS	STEPS TO ELIMINATE / MINIMIZE HAZARDS
EXAMPLE: Working while exposed to energized parts using test equipment on energized circuits.	*EXAMPLE: Sock/Arc flash or working on look-alike equipment.*	*EXAMPLE: Setting up a safe work zone to identify look-alike equipment.*

Restricted Approach Boundary:_____ inches	Prohibited Approach Boundary: _____ inches
Limited Approach Boundary: _____ inches	Flash Protection Boundary: _____ inches
Expected Incident Energy: _____ cal/cm²	

☐ Hard Hat	☐ Safety Glasses	☐ Face Shield 12 cal/cm2	☐ Hearing Protection	☐ Gloves
☐ 12 cal AR Clothing	☐ Flash Suit cal/cm2	☐ Floor Mat	☐ Insulated Tools	☐ Balaclava
Special Safety Equipment: **Fire Extinguisher**		Other PPE or Equipment:		
☐ First Aid Kit Located	☐ Nearest Hospital Located		☐ Yes ☐ No Are cell phones allowed to be used?	
Explain Conditions of Use: **911 Calls ONLY**			Near Misses: **N/A**	

Detailed Explanation: _____

_____

Field Safety Audit During the Day Time: _____ ☐ AM ☐ PM By: _____

IF CONDITIONS ARE UNCLEAR, YOU MUST OBTAIN ADDITIONAL INFORMATION
ALL PERSONNEL MUST SIGN LEGIBLY OR PRINT

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

Foreman or Supervisor Signature:

Sign:	Print:	Date:

ENERGIZED ELECTRICAL WORK PERMIT

1. TO BE COMPLETED BY THE REQUESTER

(1) Description of circuit/equipment/job location:

(2) Description of work to be done:

(3) Justification of why the circuit/equipment cannot be de-energized or the work deferred until the next scheduled outage:

Requester:	Title:

2. TO BE COMPLETED BY THE ELECTRICALLY QUALIFIED PERSONNEL DOING THE WORK

(1) Detailed job description procedure to be used in performing the above detailed work:

(2) Description of the safe work practices to be employed:

(3) Results of the Shock Risk Assessment (attach electrical risk assessment):

(a) Voltage to which personnel will be exposed = _____ volts

(b) Limited approach boundary = _____ feet

(c) Restricted approach boundary = _____ feet

(d) Necessary shock, PPE, and other protective equipment to safely perform assigned task:

(4) Results of the arc flash assessment (attach electrical risk assessment):

(a) Available incident energy at the working distance or arc flash PPE category = _____

(b) Arc flash boundary = _____ feet

(c) Necessary arc flash PPE and other protective equipment to safely perform the assigned task:

(5) Means employed to restrict access of unqualified persons from the work area:

(6) Job briefing:

(a) ☐ Hazards have been identified?
(b) ☐ Voltage levels have been identified?
(c) ☐ Foreign voltages have been identified?
(d) ☐ Any unusual work conditions have been reviewed?
(e) ☐ Arc flash protection boundaries will be implemented?
(f) ☐ An attendant will be available?
(g) ☐ Proper PPE will be inspected and donned by all persons performing work?
(h) ☐ The location of the nearest fire extinguisher is known?
(i) ☐ The location of the telephone is known?
(j) ☐ The equipment shut off/disconnect has been located?

(7) Do you agree that the above described work can be done safely? ☐ Yes ☐ No

3. APPROVALS/SIGNATURES TO PERFORM THE WORK WHILE ELECTRICALLY ENERGIZED

Electrically Qualified Personnel:	Date:
Branch Management:	Date:
FSG Safety:	Date:
GC:	Date:

Note: This Permit must be completed by a Qualified Person per NFPA 70E.
Workers must review the details of the Permit prior to starting work.
The Permit must be available at the job site during work activities.

M.O.P.

Job Name: _____

M.O.P. _____

MOP Date: _____

A) PURPOSE FOR MOP

B) SCOPE OF WORK

C) SCHEDULED START DATE

D) SCHEDULED START TIME

E) SCHEDULED COMPLETION DATE

F) SCHEDULED COMPLETION TIME

G) PRECAUTIONS (See Job Hazard Analysis)

H) SYSTEM IMPACT

I) WORK RISK ASSESSMENT (Low/Medium/High)

Low: Indicates the level of exposure to electrical arc-flash hazards or other safety concerns are reduced to a minimal safety requirement. For example, hard hats, safety glasses, boots, etc. Usually, low work risks involve activities near non-energized electrical equipment.

Medium: Indicates the level of exposure to electrical arc-flash hazards or other safety concerns are present and additional precautions are required. For example, face shields, or additional Personnel Protection Equipment (PPE) are required. Usually, medium work risks involve activities near energized electrical equipment.

High: Indicates the level of exposure to electrical arc-flash hazards or other safety concerns are elevated and additional precautions are required. For example, arc flash suits, certified safety personnel on-site, etc. Usually, high work risks involve activities on energized electrical equipment.

J) OPERATIONS RISK ASSESSMENT(Indicate Level)

Level 1: Indicates the level of operational risk to the facility due to the MOP activities having the greatest potential for immediate impact to building operations; for example, activities involving the UPS System or sub-systems that would eliminate the level of on-line redundant power.

Level 2: Indicates the level of operational risk to the facility due to the MOP activities having some potential for immediate impact to building operations; for example, activities involving the HVAC system that could delay cooling or sub-systems that would reduce the level of on-line redundant power.

Level 3: Indicates the level of operational risk to the facility due to the MOP activities having minimal potential for immediate impact to building operations; for example, activities involving the routine maintenance equipment or sub-systems that would not reduce the level of on-line redundant power.

K) MANPOWER REQUIREMENTS

1) Superintendent:

2) Journeyman:

3) Apprentice:

D) FSG MANAGEMENT PERSONNEL *(Include name and phone number)*

1) Foreman here (Foreman):

2) PM here (Project Manager):

3) General Superintendent here(General Superintendent):

4) Safety here(Safety Coordinator):

E) TOOLS, MATERIAL & EQUIPMENT

1) Equipment: *(List all needed equipment here)*

2) Materials: *(List all needed materials here)*

3) Tools: *(List all tools here)*

D) NOTIFICATIONS

1) FSG Management

2) Name of GC here

3) Name of customer here if applicable

D) CONSIDERATIONS

Equipment added	Emergency equipment	Cooling requirements
Equipment removed	All PPE	Inclement weather
Affected circuits	Hazardous material	Shade tent
Restricted work hours	Personnel experience	Hydration of personnel
Work area barriers	Back out procedures	Proper lugs
Special tools	Testing equipment	Generator / fuel
Insulated tools	Restoration plan	Permits
Safety considerations	Alarm systems	Hand tools

E) PRECONDITIONS

	DESCRIPTION	INITIALS
A	RECEIVE approved MOP from FSG's Safety Department	
B	Authorized Person A/P (Foreman's name here) to INSPECT Arc Rated clothing 40 cal/cm^, voltage rated gloves and hood, rubber mat, for reliability	
C	A/P to INSPECT and TEST 2 voltage testers for reliability (REMEMBER the three T's of testing)	
D	A/P to ESTABLISH an Arc Flash Boundary (red danger tape) as per NFPA 70E and the Arc Flash Study (00') at "name of switchgear here"	
E	SET UP temporary lighting, stage tools, material and organize work area	
F	OBTAIN Emergency contact information from all FSG employees and add to the Procedural Binder	
G	COMPLETE all quality control sheets (Meg Ohm Test, Torque Log, third party reports) and record in binder	
H		
I		
J		

F) PROCEDURES

	DESCRIPTION OF WORK OPERATION	INITIALS
1	A/P to REVIEW MOP, JHA, and EAP with all FSG employees involved	
2		
3		
4		
5		
6		
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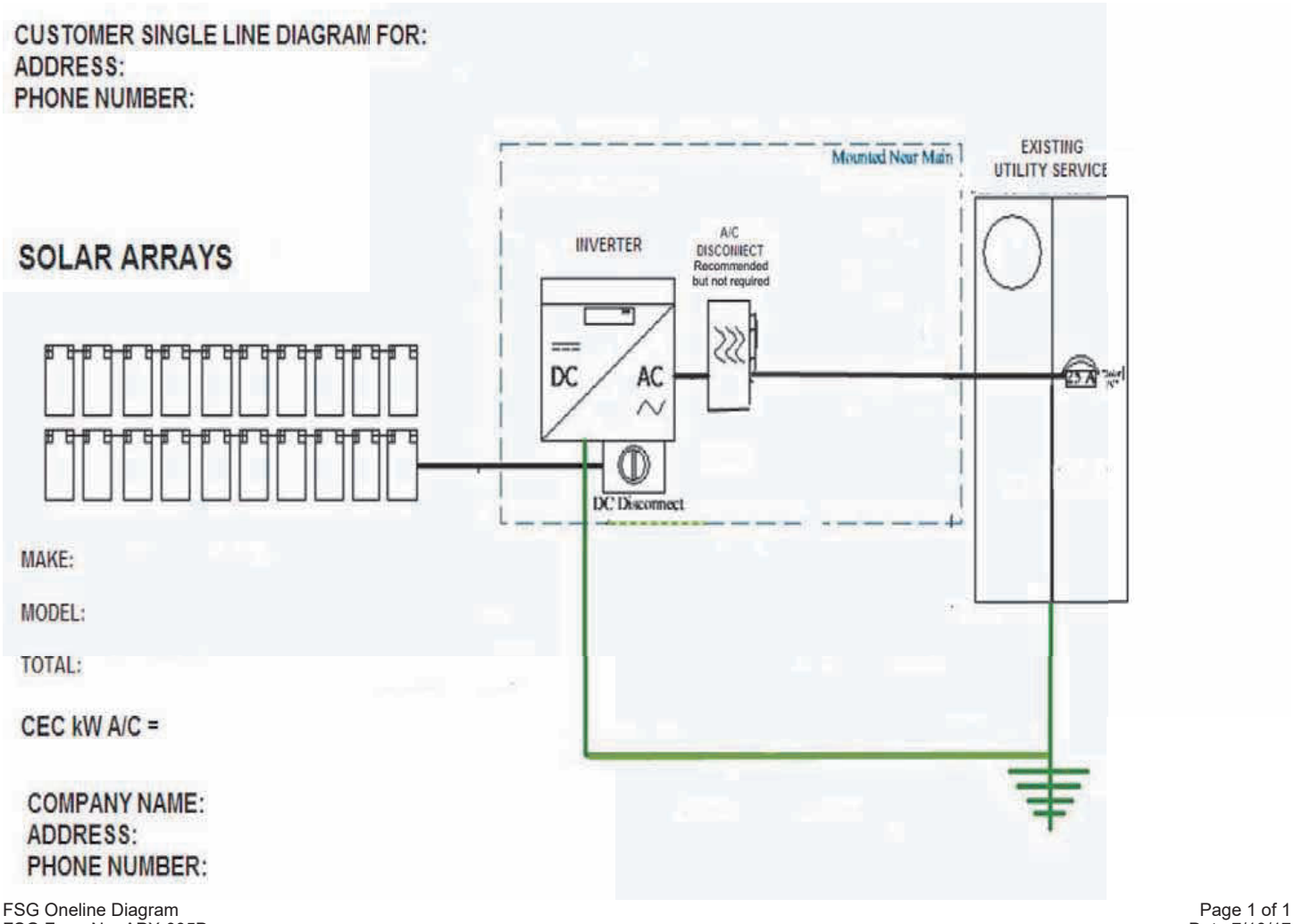
10		
11		
12		
13		
14		
15		

SAMPLE ONE-LINE ELECTRICAL DIAGRAM



FSG Oneline Diagram
FSG Form No. APX-005D

Page 1 of 1
Date 7/10/17
Rev. 1

FSG ENERGIZED PPE MATRIX

Situation listed that require Diagnostic testing/voltage testing and trouble shooting may be done energized by Qualified Person, all other Tasks will require a Permit to determine procedures/PPE	Hard Hat	Safety Glasses	Voltage rated Gloves minimum "00"	Ear Plugs	** Long Sleeve 100% Cotton Shirt	** Arc Rated suit 11.2 or 40 cal/cm²	** Arc Rated Face Shield w/Balaclava	Arc Rated Face Shield (only)	2nd Qualified and Authorized Person	JHA	Energized Work Inspection Permit (EWP)	LOTO	Insulated Tools rated @ 1,000V /Cat. III MIN. Rated meter
Testing/trouble shooting 120v Device	X	X	X		X		**	X		X			X
Testing/trouble shooting - 208v/ 277v Device	X	X	X	X	X	**	**	X		X			X
Testing/trouble shooting 480V devices	X	X	X	X	X	**	**	X		X			X
Repair/replace devices 120V thru 480V	X	X	**	**	**	**	**			X		X	
Working on 208/240V Disconnect < 60 amps	X	X	**	**	**	**	**			X		X	
Working on 208/240V Disconnect > 60 amps	X	X	**	**	**	**	**			X		X	
Working on 480v Disconnect	X	X	**	**	**	**	**			X		X	
Working on 120/208/240V < 100 amps	X	X	**	**	**	**	**			X		X	
Working on 208v Panel 100 amps or more	X	X	**	**	**	**	**			X		X	
Working on 480v Panel	X	X	**	**	**	**	**			X		X	
Working on All Switchgear	X	X	**	**	**	**	**			X		X	
Testing Voltage 120 thru 480 volt Transformers	X	X	**	**	**	**	**			X	X		X
Testing Voltage 277v to 480v Circuitry/J-Box	X	X	**	**	**	**	**			X	X		X
Removing Panel Covers and/or Deadfront 120/208/240 Volts	X	X	**	**	**	**	**			X		X	
Removing Panel Covers and/or Deadfront 277/480 Volts	X	X	**	**	**	**	**			X		X	

Situation listed that require Diagnostic testing/voltage testing and trouble shooting may be done energized by Qualified Person, all other Tasks will require a Permit to determine procedures/PPE	Hard Hat	Safety Glasses	Voltage rated Gloves minimum "00"	Ear Plugs	** Long Sleeve 100% Cotton Shirt	** Arc Rated suit 11.2 or 40 cal/cm²	** Arc Rated Face Shield w/Balaclava	Arc Rated Face Shield (only)	2nd Qualified and Authorized Person	JHA	Energized Work Inspection Permit (EWP)	LOTO	Insulated Tools rated @ 1,000V /Cat. III MIN. Rated meter
Working on Control Equipment 50V - 120v	X	X	X		X	**	**			X	X		X
Working on Control Equipment 208V - 480V	X	X	**	**	**	**	**			X		X	
Working on Motor Control Centers 277/480V	X	X	**	**	**	**	**			X		X	
Working on Motor Control Centers 120/208/240v	X	X	**	**	**	**	**			X		X	
120v Light Fixture	X	X	**	**	**	**	**			X		X	
277v Light Fixture	X	X	**	**	**	**	**			X		X	
208v Light Fixture	X	X	**	**	**	**	**			X		X	
480v Light Fixture	X	X	**	**	**	**	**			X		X	
Working on 120v J-Boxes	X	X	**	**	**	**	**			X		X	
Working on 208v J-Boxes	X	X	**	**	**	**	**			X		X	
Working on 277v J-Boxes	X	X	**	**	**	**	**			X		X	
Working on 480v J-Boxes	X	X	**	**	**	**	**			X		X	

When De-Energizing power creates a greater hazard or is infeasible, or when encountering unfamiliar or abnormal conditions, it shall be the qualified/authorized person's responsibility to seek advice and guidance from their designated Safety Manager or Safety Coordinator prior to commencing with any actions or installations. An Energized Work permit (APX-005B) and a Hazard Risk assessment (forms APX-005A & APX-005C) shall be completed, then reviewed by the safety Coordinator. EWP's shall determine if working energized will be necessary, and if so, what level of PPE from this matrix will be required, based on the equipment, it's location, the amount of fault current, the clearing time of the OCPD, and the condition and maintenance of the equipment!

All other work shall be done de-energized, and Locked and Tagged out whenever possible before any person is allowed to work on the equipment, conductors, or circuit parts, except for the tasks listed in this matrix for diagnostic testing and trouble shooting!

Please note: this matrix is the minimum requirement. Site conditions and/or situations will be different, however, adhering to this matrix will help ensure the safest possible work environment is present.

**** Please refer to the attached NFPA 70E Article 130.7(C)(A)(b) and 130.7(C)(16)- "Work Involving Electrical Hazards"**

NFPA 70E 130.7(C)(16)

1	Arc-rated jacket, parka, rainwear, or hard hat liner (AN) **Protective Equipment** Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Heavy duty leather gloves (see Note 3) Leather footwear (AN)
2	**Arc-Rated Clothing, Minimum Arc Rating of 8 cal/cm²** (see Note 1) Arc-rated long-sleeve shirt and pants of arc-rated coverall Arc-rated flash suit hood or arc-rated face shield (see Note 2) and arc-rated balaclava Arc-rated jacket, parka, rainwear, or hard hat liner (AN) **Protective Equipment** Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Heavy duty leather gloves (see Note 3) Leather footwear (AN)
3	**Arc-Rated Clothing, Minimum Arc Rating of 25 cal/cm²** (see Note 1) Arc-rated long-sleeve shirt (AR) Arc-rated pants (AR) Arc-rated coverall (AR) Arc-rated arc flash suit jacket (AR) Arc-rated arc flash suit pants (AR) Arc-rated arc flash suit hood Arc-rated gloves (see Note 1) Arc-rated jacket, parka, rainwear, or hard hat liner (AN) **Protective Equipment** Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Leather footwear
4	**Arc-Rated Clothing Selected so That the System Arc Rating Meets the Required Minimum Arc Rating of 40 cal/cm²** (see Note 1) Arc-rated long-sleeve shirt (AR) Arc-rated pants (AR) Arc-rated coverall (AR) Arc-rated arc flash suit jacket (AR) Arc-rated arc flash suit pants (AR) Arc-rated arc flash suit hood Arc-rated gloves (see Note 1) Arc-rated jacket, parka, rainwear, or hard hat liner (AN) **Protective Equipment** Hard hat Safety glasses or safety goggles (SR) Hearing protection (ear canal inserts) Leather footwear

Notes:
(1) Arc rating is defined in Article 100.
(2) Face shields are to have wrap-around guarding to protect not only the face but also the forehead, ears, and neck, or, alternatively, an arc-rated arc flash suit hood is required to be worn.
(3) If rubber insulating gloves with leather protectors are used, additional leather or arc-rated gloves are not required. The combination of rubber insulating gloves with leather protectors satisfies the arc flash protection requirement.

TABLE 130.7(C)(15)(A)(b)

Table 130.7(C)(15)(A)(b) Arc-Flash Hazard PPE Categories for Alternating Current (ac) Systems		
Equipment	**Arc Flash PPE Category**	**Arc Flash Boundary**
Panelboards or other equipment rated 240V and below Parameters: Maximum of 25 kA short-circuit current available; maximum of 0.03 sec (2 cycles) fault clearing time; working distance 455 mm (18 in.)	1	485 mm (19 in.)
Panelboards or other equipment rated >240V and up to 600V Parameters: Maximum of 25 kA short-circuit current available; maximum 0.03 sec (2 cycles) fault clearing time; working distance 455 mm (18 in.)	2	900 mm (3ft.)
600-V class motor control centers (MCCs) Parameters: Maximum of 65 kA short-circuit current available; maximum of 0.03 sec (2 cycles) fault clearing time; working distance 455 (18 in.)	2	1.5m (5 ft)
600-V class motor control centers (MCCs) Parameters: Maximum of 42 kA short-circuit current available; maximum of 0.33 sec (20 cycles) fault clearing time; working distance 455 mm (18 in.)	4	4.3 m (14 ft)
600-V class switchgear (with power circuit breakers or fused switches) and 600 V class switchboards Parameters: Maximum of 35 kA short-circuit current available; maximum of up to 0.5 sec (30 cycles) fault clearing time; working distance 455 mm (18 in.)	4	6 m (20 ft)
Other 600-V class (277 V through 600 V, nominal) equipment Parameters: Maximum of 65 kA short circuit current available; maximum of 0.03 sec (2 cycles) fault clearing time; working distance 455 mm (18 in.)	2	1.5 m (5 ft)
NEMA E2 (fused contactor) motor starters, 2.3 kV through 7.2 kV Parameters: Maximum of 35 kA short-circuit current available; maximum of up to 0.24 sec (15 cycles) fault clearing time; working distance 910 mm (36 in.)	4	12m (40 ft)
Metal-clad switchgear, 1 kV through 15 kV Parameters: Maximum of 35 kA sort-circuit current available; maximum of up to 0.24 sec (15 cycles) fault clearing time; working distance 910 mm (36 in.)	4	12m (40 ft)
Arc-resistant switchgear Type 1 or 2 [for clearing times of <0.5 sec (30 cycles) with a perspective fault current not to exceed the arc-resistant rating of the equipment], and metal-enclosed interrupter switchgear, fused or unfused of arc-resistant-type construction, tested in accordance with IEEE C37.20.7, 1 kV through 15 kV	N/A (doors closed)	N/A (doors closed)
Parameters: Maximum of 35 kA short-circuit current available; maximum of up to 0.24 sec (15 cycles) fault clearing time; working distance 910 mm (36 in.)	4 (doors open)	12 m (40 ft)
Other equipment 1 kV through 15 kV Parameters: Maximum of 35 kA short-circuit current available; maximum of up to 0.24 sec (15 cycles) fault clearing time; working distance 910 mm (36 in.)	4	12m (40 ft)
Note: for equipment rated 600 volts and below, and protected by upstream current-limiting fuses or current-limiting circuit breakers sized at 200 amperes or less, the arc flash PPE category can be reduced by one number but not below arc flash PPE category 1.		

PRONTO FIELD KNOWLEDGE EXAMPLE

Form Information

Form Name:	**T2, T9, T13, T15 and T31: Field Knowledge Assessment**
Submitter Name:	Cory Bruner (cory.bruner@fsgi.com)
Submission Date:	Jun 2, 2017 8:54:05 AM CDT
Server Receive Date:	Jun 2, 2017 8:54:12 AM CDT
Reference Number:	20170602-1861058250
Location:	4401 Westgate Blvd, Austin, TX 78745, United States Jun 2, 2017 8:54:02 AM CDT [View Map]

A.) General Information

Location	4401 Westgate Blvd, Austin, TX 78745, United States Jun 2, 2017 8:51:30 AM CDT [View Map]
Date and Time	Jun 2, 2017 8:51:33 AM CDT
Subject:	T31 Electrical Safe Work
Trainer:	John Smith
Trainer Signature:	
Employee Name:	John Doe
Employee Signature:	

B.) Standards for Electrical Safety

1.) Employee can locate in the OSHA General Industry and Construction Codes the proper electrical safety information? (I.E. GI-Subpart S and Cont.-Subpart K	Acceptable
2.) Employee is familiar with NFPA 70E and can utilize the tables to identify items such as required PPE?	Acceptable
3.) Employee is familiar with FSG electrical safety policies and FSG No Live Work Policy?	Acceptable

C.) Electrical Fundamentals

1.) Employee has a good understanding of Electricity?	Acceptable
2.) Employee has a good understanding of Conductors/Insulators?	Acceptable
3.) Employee has a good understanding of Shock Safe and Unsafe Current Values?	Acceptable

D.) Hazard Anaylsis

1.) Employee has a good understanding of NFPA 70E Hazards?	Acceptable
2.) Employee has a good understanding of NFPA 70E Approach Boundaries for Shock Protection? NFPA 70E Informative Annex C Limits of Approach	Acceptable
3.) Employee has a good understanding of NFPA 70E Arc Flash Boundaries?	Acceptable
41.) Employee has a good understanding of NFPA 70E Clearance Distances?	Acceptable
5.) Employee has a good understanding of NFPA 70E labeling requirements?	Acceptable

E.) Work Involving Electrical Hazards

1.) Employee has an understanding of OSHA and NFPA 70E live work justification requirements?	Acceptable
1.) Employee has an understanding of NFPA 70E live work permit requirements?	Acceptable
3.) Employee has an understanding of OSHA and NFPA 70E live work exemptions? 130.4 (B)(3)	Acceptable

F.) Personal Protective Equipment

1.) Employee is knowledgeable in the types of arc rated clothing and their use and limitations?	Acceptable
2.) Employee is knowledgeable in the NFPA 70E Hazard Risk Categories?	Acceptable
3.) Employee is knowledgeable about voltage rated gloves and tools?	Acceptable
4.) Employee is knowledgeable with NFPA 70E PPE Selection, Hazard Analysis vs. 70E tables?	Acceptable

G.) Reducing Electrical Hazards

1. Employee is knowledgeable about fuses?	Acceptable
2. Employee is knowledgeable about circuit breakers?	Acceptable
3. Employee is knowledgeable about guarding electrical hazards?	Acceptable
4. Employee is knowledgeable about grounding?	Acceptable
5. Employee is knowledgeable about GFCI?	Acceptable

H.) Meter Safety

1.) Employee demonstrated proper selection and use of meter?	Acceptable

2.) Employee knows the different types meters and testing equipment?	Acceptable
3.) Employee knows what category of meters can be used for what type of testing?	Acceptable

l.) Lockout/Tagout

1.) Employee can demonstrate the proper steps for de-energizing using LO/TO?	Acceptable
2.) Employee can demonstrate the proper steps for re-energizing using LO/TO?	Acceptable
3.) Employee can demonstrate the proper steps for inspection LO/TO?	Acceptable
4.) Employee konws the difference between simple and complex LO/TO?	Acceptable
5.) Employee is aware of where he/she can locate LO/TO procedures?	Acceptable

BRANCH CIRCUIT CHECKLIST

Building: _____ Panel Name: _____

Building Electrical Superintendent: _____ Date: _____

Circuits being energized:_____

1. Has the blue print been checked to verify where the circuit goes ?	YES	NO	N/A
2. Did you verify that the device and cover plate have been installed ?	YES	NO	N/A
3. Did you verify that all j-boxes are made up and covered	YES	NO	N/A
4. Are you testing an incomplete circuit ?	YES	NO	N/A
A. Have wire nuts been re-installed ?	YES	NO	N/A
B. Have wire nuts been taped ?	YES	NO	N/A
C. Have the conductors been placed back in the outlet box ?	YES	NO	N/A
D. Has circuit been turned back off and LOTO ?	YES	NO	N/A
5. If there is MC Cable installed has it been stripped back and wire nuts installed on the conductors?	YES	NO	N/A
A. Have the wire nuts been taped ?	YES	NO	N/A
B. Has the MC cable been placed above 8' ?	YES	NO	N/A
6. Have all the fixture tails been landed ?	YES	NO	N/A
7. Has all personnel been cleared away from circuits being energized ?	YES	NO	N/A
8. After energizing make sure that all devices work, that there is proper voltage, and correct circuit number.	YES	NO	N/A
9. Do you have the proper PPE per the Matrix and are wearing it?	YES	NO	N/A

	Journeyman	**FSG Superintendent**
Sign Name	_____	_____
Print Name	_____	_____

COMMISSION CHECKLIST

Equipment	Installer			Witness		
Transformer :						
1. Phasing correct ?	Yes	No	N/A	Yes	No	N/A
2. Are all conductors terminated ?	Yes	No	N/A	Yes	No	N/A
3. All connections are torqued ?	Yes	No	N/A	Yes	No	N/A
4. Is transformer grounded ?	Yes	No	N/A	Yes	No	N/A
5. Is cover on ?	Yes	No	N/A	Yes	No	N/A
Panel :						
1. Phasing correct ?	Yes	No	N/A	Yes	No	N/A
2. Are all conductors terminated and numbered ?	Yes	No	N/A	Yes	No	N/A
3. Are all connections tight ?	Yes	No	N/A	Yes	No	N/A
4. Is panel grounded ?	Yes	No	N/A	Yes	No	N/A
5. Is cover on ?	Yes	No	N/A	Yes	No	N/A
Disconnect :						
1. Phasing correct ?	Yes	No	N/A	Yes	No	N/A
2. Are all conductors terminated ?	Yes	No	N/A	Yes	No	N/A
3. Are all connections tight ?	Yes	No	N/A	Yes	No	N/A
4. Is disconnect grounded ?	Yes	No	N/A	Yes	No	N/A
5. Is cover on ?	Yes	No	N/A	Yes	No	N/A

Installer :	**Witness :**
Print :	Print :
Sign :	Sign :
Date :	Date :

If company personnel leave the area of the equipment to be energized with-out locks and tags being installed on equipment, or area is left overnight with company locks and tags in place, then this form and rechecking of equipment has to be redone again before energizing.

1. Did we install the branch ckts going to the panel ? Yes No N/A
2. Is it our job to energize the branch ckts. ? Yes No N/A
3. Is customer aware that if branch circuits were installed by others that there may be unfinished work or work done against the NEC Code and that FSG is not liable for said work. Yes No N/A

Customer needs to sign below if they would like for FSG to energize branch circuits that belongs to others. By signing this FSG is not responsible for any unfinished work after panel unless it is in the

Print : _____ **Sign :** _____

Date : _____

TEMPORARY INSPECTION REPORT

Job Name: _____ Job No: _____ Date Inspected:_____ Page __ of __

Building or Section: _____ Inspected By: _____

ELECTRICAL INSPECTION OUTLETS

Floor	Location	Panel Desg.	Circuit No.	GFI Trip Setting	Boxes Secured	KO Seals	Circuitry Marked	Covers Secured	Devices Secured	Calbes Secured

Comments: _____

ELECTRICAL INSPECTION PANELS

Floor	Location	Panel Desg.	Panel Schedule	KO Seals	Breaker Blanks	Cables Secured	Warning Signs	Covers Secured	Cover Area

Comments: _____

ELECTRICAL INSPECTION LIGHTING

Floor	Location	Defective Lamps Replaced	Cages Installed	Cage Supports	Cables Secured	Pathways Illuminated	Egresses Illuminated	Task Lighting Available

Comments: _____

ELECTRICAL INSPECTION CORDS/POWER TOOLS

Power Tools	Ext. Cords Inspected	Ground Pins In-Place	Ext. Cords Color Coded	A.E.G.C.P.	Fire Extinguishers	First-Aid Kit Stocked

Assessment of safe use of temporary power by other trades: _____

_____

_____

Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

ASSURED GROUNDING PROGRAM CODING SCHEME

TAPE COLOR CODING SYSTEM		
Month	**Monthly Color Code**	**Quarterly Code**
Jan.	**White**	**White**
Feb.	**White & Yellow**	
March	**White & Blue**	
April	**Green**	**Green**
May	**Green & Yellow**	
June	**Green & Blue**	
July	**Red**	**Red**
Aug.	**Red & Yellow**	
Sept.	**Red & Blue**	
Oct.	**Orange**	**Orange**
Nov.	**Orange & Yellow**	
Dec.	**Orange & Blue**	

LO/TO LOG

DATE	DESCRIPTION/LOCATION OF WORK	AUTHORIZED EMPLOYEES	DATE COMPLETED

SAFETY DATA SHEETS

COMMON NAME	TRADE NAME	MANUFACTURER
1. Wire Pulling Foam Lubricant	Wire Pulling Foam Lubricant	Klein
2. All Weather Blue Quickset Cement	All Weather ENT Blue Quickset PVC Solvent Cement	Carlon
3. Clear PVC Cement	All Weather Quickset PVC Solvent Cement	Carlon
4. Clear Primer	Carlon Clear Primer NSF	Carlon
5. Cold Galvanize	Zinc It Instant Cold Galvanized Aerosol	CRC Industries, Inc.
6. Cold Shrink	Cold Shrink QS III Silicone Rubber Splice Kit	3M Industries
7. Contact Cleaner	CO Contact Cleaner	CRC Industries, Inc
8. Cutting Oil	Cutting Oil Aerosol	CRC Industries, Inc.
9. Dark Thread Cutting Oil	Dark Thread Cutting Oil	Ridgid
10. Diesel	Chevron HS Diesel 2	Chevron
11. Electrical Tape	Super 33+ and Super 88 Electrical Insulating Tape	3M Industries
12. Electrical Tape	3M Electrical Tape 1298,1350,1350F, 1350T	3M Industries
13. Friction Tape	Temflex 1755 and Tartan 1760	3M Industries
14. Fluorescent Marking Paints	Fluorescent Marking Paints	CRC Industries, Inc.
15. Fire Extinguisher	Kidde ABC Fire Extinguisher	Kidde- Residential and Commercial
16. Gasoline	Chevron Regular Unleaded Gasoline	Chevron
17. Gray PVC Solvent Cement	Carlon Medium Gray PVC Solvent Cement	Carlon
18. Green Spray Paint	Greenlee Green Spray Paint	Greenlee Textron
19. Heat Shrink Tubing	Heat Shrink Soldering Sleeves	3M Industries
20. Hydraulic Oil	15- BPG Hydraulic Oil	Greenlee Textron
21. Lectra Clean Aerosol	Lectra Clean Aerosol	CRC Industries, Inc.
22. Lectra Shield Aerosol	Lectra Shield Aerosol	CRC Industries, Inc.
23. Light Thread Cutting Oil	Light Thread Cutting Oil	Ridgid
24. Multi-Purpose Lubricant	2-26 Multi-Purpose Precision Lubricant Aerosol	CRC Industries, Inc.
25. Nickel Cadmium Battery	Sealed Nickel Cadmium Rechargeable Battery	Power Sonic
26. Polywater Lubricant	Polywater Lubricant J	American Polywater Corp.
27. RTV Silicone Clear	RTV Silicone Clear	CRC Industries, Inc.
28. Rust Proof Enamel Spray Paint	Rust Proof Enamel Spray Paint	CRC Industries, Inc.
29. Scotchkote	Scotchkote 350 Liquid Epoxy	3M Industries

COMMON NAME	TRADE NAME	MANUFACTURER
30. Utility Cable Pulling Lubricant	Aqua Gel II Utility Cable Pulling Lubricant	Ideal Industries
31. Wire Pulling Lubricant	Clear Glide Wire Pulling Lubricant	Ideal Industries, Inc.
32. Wire Pulling Lubricant	Yellow 77 Wire Pulling Lubricant	Ideal Industries
33. Wasp and Hornet Killer	Wasp and Hornet Killer Plus	CRC Industries, Inc

CONFINED SPACE DETERMINATION

Purpose of Entry: _____ Time: _____

Department:_____ Job #: _____ Expiration: _____

Supervisor in Charge of *Work:*_____ Their phone #: _____

Entrants	Entrants	Entrants
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Attendants: _____

Confined Space Supervisor(s):_____

All parties have current training: Yes No, explain_____

	Yes N/A	Special PPE available at location	
Electrical lines and attachments de-energized		Respiratory protection available at location	
Lock Out/ Tag Out in place, systems tried		GFCI's in place on all electrical equipment	
Area secured, barricaded, posted		Ventilation system in place and operational	
Fire extinguishers or other equipment in place		Rescue team established	
Rescue system in place and operational		Air sampling and testing equipment calibrated	
Lifelines & other fall protection equipment in place		Pre-entry testing and sampling is complete	
Lighting is explosion proof, 12 volt, approved type		Communication: **Radio Sight Rope** Other	
Protective clothing available at location		(circle one)	Yes N/A
Hearing protection available at location			

Atmospheric Testing Equipment and Readings

Brand/ Manufacturer	Type/ Model	Serial/ ID #	Calibration Date

Substances Tested	OSHA PEL's	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
O_2 (%)	19.5% to 23.5%											
LEL (%)	Below 10%											
CO (ppm)	35ppm*/ 200ppm**											
H_2S (ppm)	10ppm*/ 50ppm**											

***= 8 hour Time Weighted Average Exposure Limit**
****= Short-Term Exposure Limit (10-15 minutes)**

Above readings should be recorded every 1-2 hours, with continuous monitoring taking place.

Print name of person who tested atmosphere prior to entry _____

Emergency Phone #'s: _____ Print name of person who is trained in CPR: _____

Special conditions or instructions _____

Client/ GC signature authorizing entry_____ Phone #_____

Signature of Safety Profession approving entry _____ Date/Time completed _____

Note: Post this determination at confined space along with entry or non entry permit during entry and return it to the safety department when work is competed.

CONFINED SPACE PERMIT

Location and Description of Confined Space: _____ Date: _____
Purpose of Entry: _____ Time: _____

Department: _____ Job #: _____ Expiration: _____

Supervisor in Charge of *Work :* _____ Their phone #: _____

Entrants	Entrants	Entrants
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Attendants: _____

Confined Space Supervisor(s): _____

All parties have current training: Yes No,
explain _____

	Yes N/A	Special PPE available at location	
Electrical lines and attachments de-energized		Respiratory protection available at location	
Lock Out/ Tag Out in place, systems tried		GFCI's in place on all electrical equipment	
Area secured, barricaded, posted		Ventilation system in place and operational	
Fire extinguishers or other equipment in place		Rescue team notified of work commencing	
Rescue system in place and operational		Air sampling and testing equipment calibrated	
Lifelines & other fall protection equipment in place		Pre-entry testing and sampling is complete	
Lighting is explosion proof, 12 volt, approved type		Communication: **Radio Sight Rope** Other	
Protective clothing available at location		(circle one)	Yes N/A
Hearing protection available at location			

Atmospheric Testing Equipment and Readings

Brand/ Manufacturer	Type/ Model	Serial/ ID #	Calibration Date

Substances Tested	OSHA PEL's	Pre-Entry	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
O_2 (%)	19.5% to 23.5%											
LEL (%)	Below 10%											
CO (ppm)	35ppm*/ 200ppm**											
H_2S (ppm)	10ppm*/ 50ppm**											
SO_2 (ppm)	5ppm*/ 15ppm**											

*= 8 hour Time Weighted Average Exposure Limit **= Short-Term Exposure Limit (10-15 minutes)
Above readings should be recorded every 1-2 hours, with continuous monitoring taking place.
Print name of person who tested atmosphere prior to entry _____

Emergency Phone #'s: _____ Print name of person who is trained in CPR: _____
Special conditions or instructions _____

Client/ GC signature authorizing entry _____ Phone # _____

Entry supervisor signature approving entry _____ Date/Time completed _____

Note: Post this permit at confined space during entry and return it to the safety department when work is competed.

NON PERMIT REQUIRED CONFINED SPACE

Location and Description of Confined Space: _____ Date: _____

Purpose of Entry: _____ Time: _____

Department: _____ Job #: _____ Expiration: _____

Supervisor in Charge of *Work :* _____ Their phone #: _____

Entrants	Entrants	Entrants
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Attendants: _____

Confined Space Supervisor(s): _____

All parties have current training: Yes No, explain _____

ANY CONDITIONS CHANGED FROM DETERMINATION	Yes Nn	Special PPE available at location
****IF YES SPACE MAY BE PERMIT REQUIRED****		

Atmospheric Testing Equipment and Readings

Brand/ Manufacturer	Type/ Model	Serial/ ID #	Calibration Date

****ATMOSPHERE HAS TO TEST AT ZERO FOR ALL PARAMETERS TO REMIAN NON PERMIT REQUIRED****

Substances Tested	OSHA PEL's	Pre-Entry	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
O_2 (%)	19.5% to 23.5%											
LEL (%)	Below 10%											
CO (ppm)	35ppm*/ 200ppm**											
H_2S (ppm)	10ppm*/ 50ppm**											
SO_2 (ppm)	5ppm*/ 15ppm**											

***= 8 hour Time Weighted Average Exposure Limit**
****= Short-Term Exposure Limit (10-15 minutes)**

Above readings should be recorded every 1-2 hours, with continuous monitoring taking place.
Print name of person who tested atmosphere prior to entry _____

Emergency Phone #'s: _____ Print name of person who is trained in CPR: _____

Special conditions or instructions _____

Client/ GC signature authorizing entry _____ Phone # _____

Entry supervisor signature approving entry _____ Date/Time completed _____

Note: Post this permit at confined space during entry and return it to the safety department when work is competed.

EXCAVATION TRENCHING CHECKLIST

To be completed prior to any excavation or trenching work. This is an initial review of required procedure.

Project:		Date:	
Competent Person:		Time:	
Excavation Depth/Width:		Soil Type:	
Protective System:			

General Site Conditions	Yes	No	N/A
Excavation, adjacent areas and protective systems inspected by a designated competent Person daily prior to start of work or as hazards warrant.	☐	☐	☐
Competent Person has the authority to remove employees from the excavation immediately and stop work.	☐	☐	☐
Surface encumbrances removed or supported	☐	☐	☐
Employees protected from loose rock/soil that could pose a hazard by falling or rolling into the excavation.	☐	☐	☐
Spoils, materials and equipment set back at least 2’ from the edge of the excavation.	☐	☐	☐
Barriers provided at all remotely located excavations	☐	☐	☐
Walkways and bridges over excavations 6’ or more in depth are equipped with standard guardrails and toeboards.	☐	☐	☐
Warning vests or highly visible clothing provided and worn by all employees exposed to vehicular traffic.	☐	☐	☐
Employees are prohibited from going or working under suspended loads	☐	☐	☐
Employees prohibited from working on the faces of sloped or benched excavations above other employees.	☐	☐	☐

Utilities	Yes	No	N/A
Utility company contacted and/or utilities located	☐	☐	☐
Locations of utilities marked	☐	☐	☐
Underground installations protected, supported or removed when excavation is open	☐	☐	☐
At least a 24” radius should be hand dug around each utility to expose it	☐	☐	☐

Hazardous Atmospheres	Yes	No	N/A
Atmospheres within the excavation tested where there is a reasonable possibility of an oxygen deficiency, combustible or harmful contaminant posing a hazard.	☐	☐	☐
Adequate precautions taken to protect employees from exposure to an atmosphere containing less than 19.5% or more than 23.5% oxygen an/or other hazardous atmosphere.	☐	☐	☐
Ventilation provided to prevent employee exposure to an atmosphere containing flammable gas in excess of 10% of the LEL (Lower Explosive Limit) of the gas	☐	☐	☐
Testing conducted often to ensure that the atmosphere remains safe	☐	☐	☐
Emergency equipment, such as breathing apparatus, safety harness and lifeline readily available where hazardous atmospheres could or do exist	☐	☐	☐
Employees trained to use PPE	☐	☐	☐

Means of Access and Egress	Yes	No	N/A
Unobstructed lateral to means of egress no greater than 25' in excavations 4' or more in depth	☐	☐	☐
Ladders used in excavations secured and extended 36" above the edge of the trench	☐	☐	☐
Employees protected from cave-ins when entering or exiting an excavation	☐	☐	☐

Wet Conditions	Yes	No	N/A
Precautions taken to protect employees from the accumulation of water	☐	☐	☐
Water removal equipment monitored by a competent person	☐	☐	☐
Surface wear or runoff diverted or controlled to prevent accumulation in the excavation	☐	☐	☐
Inspections made after rainstorm or other hazard increasing occurrence	☐	☐	☐

Support Systems	Yes	No	N/A
Materials and/or equipment for support systems selected based on soil analysis, depth, width and expected loads	☐	☐	☐
Materials and equipment used for protective systems inspected and in good condition.	☐	☐	☐
Materials and goods not in good condition have been tagged and removed from service.	☐	☐	☐
Damaged materials and equipment used for protective systems inspected by a registered professional engineer after repairs and before being placed back into service.	☐	☐	☐
Protective systems installed without exposing employees to the hazards of cave-ins, collapse or threat of being struck by materials or equipment.	☐	☐	☐
Members of support system securely fastened to prevent failure	☐	☐	☐
Support systems provided to ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.;.	☐	☐	☐
Excavations below the level of the base or footing supported and approved by a registered professional engineer.	☐	☐	☐
Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure.	☐	☐	☐
Backfilling progresses with removal of the support system	☐	☐	☐
Excavate material to a level no greater than 2' below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.	☐	☐	☐
Shield system placed to prevent lateral movement	☐	☐	☐
Employees are prohibited from remaining in shield system during vertical movement	☐	☐	☐

Comments: _____

_____

DAILY FORKLIFT CHECKLIST

Name/Type of Forklift: Branch:

Operator or Inspectors Name:

Week of:

	INSPECTION ITEM & DESCRIPTION	MON	TUES	WED	THURS	FRI	SAT
1	DAMAGE – no bent, dented, or broken parts						
2	LEAKS – no engine, brakes, or hydraulics leaks						
3	TIRES/WHEELS – in good condition no cuts, chunks, or excessive wear						
4	FORKS – in place, properly secured, no damage						
5	MAST – chains, cables & hoses in good condition						
6	BATTERY/CONNECTORS – caps in place, connectors in good condition						
7	HORN – sounds						
8	LIGHTS – working properly						
9	GAUGES – working properly and are clearly visible						
10	CONTROLS – function properly and are accurately labeled (raise/lower, tilt, sideshift)						
11	STEERING – smooth, no binding, no excessive play						
12	BRAKES – working properly, stop lift within required distance; parking brake allows no movement						
13	LABELS – decals are in place and readable (i.e. load limit chart)						
14	GUARDS – overhead, load backrest, battery retainer						
15	SAFETY DEVICES – seatbelt, fire extinguisher						
16	OPERATIONS MANUAL – stored on lift						
17	HOUR METER READING						

Comments: _____

STANDARD INTERPRETATION

UNITED STATES
DEPARTMENT OF LABOR

OSHA **English | Spanish**

Find it in OSHA

A TO Z INDEX

ABOUT OSHA **WORKERS** **EMPLOYERS** **REGULATIONS** **ENFORCEMENT** **TOPICS** **NEWS & PUBLICATIONS** **DATA** **TRAINING**

Standard Interpretations - Table of Contents

• **Standard Number:** 1926.404(b)(1)(iii)(C)

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

April 18, 2014

Mr. Wes Woodward, Maintenance Mgr.
Sugar Loaf Senior Living

Dear Mr. Woodward:

This letter is in response to your letter dated March 31st, 2014, to the Occupational Safety and Health Administration (OSHA). This letter was forwarded to OSHA's Directorate of Enforcement Programs for response. You had a question about OSHA requirements for replacing the electrical cord on a vacuum cleaner.

This letter constitutes OSHA's interpretation only of the requirements discussed below and may not be applicable to any question not delineated within your original correspondence. Your question and our reply follow:

Question: Can I replace the broken end of an electrical cord on my vacuum cleaner with a UL approved plug? Or must I replace the entire cord on the machine?

Response: The letter you referenced from April 4, 2010 (letter # 20070926-7973; https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=27353), does apply to the scenario you described. As stated in the referenced letter, damaged or defective cords can be replaced so long as they return to their "approved" state. Therefore, you may replace the broken end of the electric cord of the vacuum cleaner with an approved UL plug, so long as the equipment returns to its approved condition; and so long as the equipment is visually inspected for any damages prior to use on any shift.

In addition to the information we have provided above, the following links on electric cords, and general electrical safety, may be useful for you:

- Electrical safety participant guide - https://www.osha.gov/dte/grant_materials/fy07/sh-16586-07/4_electrical_safety_participant_guide.pdf*
- OSHA's electrical safety page and guide to standards - https://www.osha.gov/SLTC/electrical/index.html

Thank you for your interest in occupational safety and health. We hope you find this information helpful. To ensure that you are using the correct information and guidance, please consult OSHA's website at https://www.osha.gov/. If you have further questions, please feel free to contact the Directorate of Enforcement Programs at (202) 693-2100.

Sincerely,

Thomas Galassi, Director
Directorate of Enforcement Programs

* **Accessibility Assistance:** Contact the Directorate of Enforcement Programs at (202) 693-2129 for assistance accessing PDF materials.

Standard Interpretations - Table of Contents

UNITED STATES
DEPARTMENT OF LABOR

Occupational Safety and Health Administration
200 Constitution Ave., NW,
Washington, DC 20210
800-321-6742 (OSHA)
TTY
www.OSHA.gov

FEDERAL GOVERNMENT

White House
Affordable Care Act
Disaster Recovery Assistance
USA.gov

OCCUPATIONAL SAFETY AND HEALTH

Frequently Asked Questions
A - Z Index
Freedom of Information Act
Read the OSHA Newsletter

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STANDARD INTERPRETATION

UNITED STATES
DEPARTMENT OF LABOR

OSHA English | Spanish

Find it in OSHA

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Standard Interpretations - Table of Contents

- **Standard Number:** 1926.403; 1926.403(a); 1926.404; 1926.404(b)(1)(iii)(C)

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.

April 4, 2010

Letter # 20070926-7973

Re: Whether extension cords may be repaired and returned to use.

Question: Where an extension cord being used in construction has been damaged near the plug end, is it permissible to replace the plug with an approved cord cap made for that type of cord, provided the repair is done by a qualified electrician?

Answer: Extension cords used in construction may be repaired, so long as the repair returns the cord to the "approved" state required by §1926.403(a).

This section states, "All electrical conductors and equipment shall be approved."

The repair of cords and cord sets is permitted under 1926.404(b)(1)(iii)(C):

> Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, shall be visually inspected before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications for possible internal damage. Equipment found damaged or defective **shall not be used until repaired**. (Emphasis added.)

Repairs of extension cords are therefore permitted under §1926.404(b)(1)(iii)(C). However, in order to remain compliant with §1926.403(a), the repairs must return the equipment to the state in which it was initially approved.

Similar repairs are discussed in our May 19, 2003 letter to Barry Cole:

> To satisfy the requirements of the OSHA standards, a repair would have to restore the tool to its "approved" condition in accordance with §1926.403(a). Tools ... are approved as complete factory-produced entities. The approval is for the tool as a whole - its design, capacity, materials and construction. This provision precludes the use of an approved tool if its characteristics are materially altered.

If you need additional information, please contact us by fax 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,

Bill Parsons, Acting Director
Directorate of Construction

Standard Interpretations - Table of Contents

UNITED STATES
DEPARTMENT OF LABOR

Occupational Safety and Health Administration
200 Constitution Ave., NW,
Washington, DC 20210
800-321-6742 (OSHA)
TTY
www.OSHA.gov

MONTHLY VEHICLE INSPECTION CHECKLIST

Date: _____
Branch: _____ **Mileage:** _____
Unit # _____ **Next Oil Change (Miles):** _____
License Plate : _____ **Registration Date:** _____
Driver and Employee #: _____ **State Inspection Date:** _____
Inspect. By (Employee #): _____ **Yearly Bucket / Sign Inspect Date:** _____

Indicate "Yes" if item checked is adequate, operational, and safe. Indicate "No" to indicate repair or other action is required. Use N/A to indicate "Not applicable".

Check Under the Hood	YES	NO	N/A
Engine oil level (change at 5,000 miles)			
Radiator water level			
Battery, water level, condition, state of charge, battery terminals			
Inspect Engine Belts			
Start the engine and check for the following	**YES**	**NO**	**N/A**
Brakes functional (visually inspect front pad and rotor)			
Hydraulic system, fluid level, visible leaks			
Lights and turn signals operational			
Automatic Transmission Fluid Level (change at 50,000 miles)			
Horn and backup alarm functional			
Check Outside the Vehicle			
Check body work for damage			
Tires, condition, proper inflation as recommended by manufacturer			
Windshield, clean, unbroken, wipers functional			
Load chart, in place, legible			
Pins and bushings, condition, lubricated			
Cable and drum, condition			
Block/Ball and hook, safety latch, condition			
Cable guides			
Check Inside the Vehicle			
Camera - Disposable / Digital			
Fuel gauge operational			
Seat belts work properly			
Valid insurance paperwork & Vehicle accident forms			
First Aid Kit/Fire Extinguisher (if applicable)			
PPE (All Vehicles)- Safety glasses, Hard Hat, SDS book, Safety Handbook, Protocol papers			
Additional PPE for Service Vehicles- Triacetate Face Shield, 00 Gloves, Safety cones, Safety vest, Hearing protection, Leather gloves			
Excessive steering wheel play			
All gauges and warning lights operational			
Check the following from the operator's position:			
Verify outriggers functional			
Verify load line functional			
Verify boom functional, all motions			

Notes: _____

On completion of inspection and after branch review, please fax report to SM or SC.

SILICA EXPOSURE CONTROL MATRIX

SILICA EXPOSURE CONTROL MATRIX

Task		Control methods	Personal protective equipment	Comments
Grinding	Grinding	• Barrier or enclosure systems are required to restrict access to and contain the work area. • Local exhaust ventilation (LEV)—use specially designed tuck point grinders with HEPA vacuum attachments. • A specially designed oscillating tool is available for mortar removal. The tool can be purchased with an LEV attachment. • When LEV cannot be used, construct an enclosure including a negative air unit for dilution ventilation. • Personal protective equipment.	• Full-face air purifying respirator equipped with 100 series HEPA filters. • For challenging jobs where LEV or wetting control cannot be used, full-face piece supplied-air respirators operated in pressure-demand mode or full-face piece supplied air respirators operated in continuous-flow mode will be required. • Disposable coveralls should be worn for grinding work.	• Hearing protection should be worn.
	Enclosed areas (e.g., stairwells, elevator shafts)	• Full enclosure systems are required to restrict access to and contain the work area. • LEV—uses concrete grinders with HEPA vacuum attachments. • Have dedicated grinders available with corner and flat-end shrouds. • Some wet grinding may be acceptable—the approved tasks must be listed on the site work plan. • Personal protective equipment.	• Full-face air purifying respirator or powered air purifying respirator (PAPR) with P100 series HEPA filters. • If effective dilution ventilation within the work area enclosure cannot be established, then full-face piece supplied-air respirators operated in pressure-demand mode or full-face piece supplied air respirators operated in continuous-flow mode will be required. • Disposable coveralls must be worn • Hearing protection should be worn.	• LEV attachments for concrete grinders are not effective for certain non-flat grinding surfaces; therefore, full-face piece supplied-air respirators operated in pressure-demand mode or full-face piece supplied air respirators operated in continuous-flow mode will be required. • HEPA filters should be checked routinely throughout the work shift to ensure they are not clogged with silica dust.
	Floor grinding	• Barrier or enclosure systems are required to restrict access to and contain the work area. • Local exhaust ventilation—a variety of specially designed floor grinding systems are available equipped with HEPA filtration. These systems should be used when practical. • Wet grinding may be an option, provided acceptable slurry cleanup procedures are documented and followed. • Personal protective equipment.	• Half-face air purifying respirator equipped with P100 series HEPA filters. • Full-face air purifying respirator or powered air purifying respirator (PAPR) with P100 series HEPA filters, when working in an enclosed area and visible dust is observed. • Disposable coveralls should be considered. • Eye protection should be worn when using a half-face respirator. • Hearing protection should be considered when using powered equipment.	• Portable shot blaster (floor smoothing) systems equipped with dust controls are available for floor grinding. • When large amounts of concrete are to be removed, filter systems should be more substantial (e.g., two vacuums connected in series—one large course filter system followed by a finer filter system). This will improve efficiency of the overall unit. • Vacuum systems will likely need to be cleaned and inspected frequently.

SILICA EXPOSURE CONTROL MATRIX

Task		Control methods	Personal protective equipment	Comments
Drilling	Walls, floors, and ceilings	• Barriers to restrict access to the work area. • Dust capture tool (e.g., a dust cap, LEV, or wetting method). • Personal protective equipment.	• Half-mask air purifying respirator equipped with P100 series HEPA filters. • Eye protection should be worn when using a half-face respirator. • Waterproof equipment where appropriate. • Hearing protection should be considered when using powered equipment.	• Hammer drills (variety of sizes) are available. Some units are equipped with local exhaust ventilation attachments (with HEPA filters). • A “dust cap” is a dust-capturing device that fits between the drill and the working surface (on the end of the drill). This is useful for overhead ceiling and wall drilling. A few different types are available. • When water is used as a dust control, the slipping hazard must be considered and managed. • Large concrete drills can be purchased that are equipped with a water spray attachment. Any wet slurry must be cleaned up when the work is completed.
Chip hammering and jackham-mering	Walls, floors, and ceilings	• Barriers must routinely be established to restrict access to these work areas. Enclosure systems must be constructed when controls are not effective at reducing visible airborne dust. • Local exhaust ventilation (see comment) when practical. • Wet methods can be used and are often very effective for floor hammering. • Personal protective equipment.	• Half-face or full-face air purifying respirator or powered air purifying respirator (PAPR) with P100 series HEPA filters, depending on the effectiveness of the controls. • Disposable coveralls should be worn when using full-face respirators. Waterproof PPE (and clothing) required when wetting methods are used. • Eye protection should be worn when using a half-face respirator. • Hearing protection should be considered when using powered equipment.	• LEV could include a negative air unit or HEPA vacuum positioned near the working surface. These controls may be practical when chip hammering walls or other vertical surfaces or locations where water cannot be used. • Wet methods could include a portable airless sprayer, air mister, or hose sprayer. Slurry should be cleaned up when the work is completed to avoid secondary dust exposure hazard. • Caution—water may produce electrocution and slipping hazards.

SILICA EXPOSURE CONTROL MATRIX

Task		Control methods	Personal protective equipment	Comments
Cutting of concrete slab and concrete masonry products		• Barrier or enclosure systems are required to restrict access to and contain the work area. • Wetting methods of control can be very effective and should be used as a first choice when saw cutting concrete or concrete products (see comment). • LEV systems for concrete saws must be considered as a dust control when wet methods cannot be used. • Personal protective equipment.	• Half-face or full-face air purifying respirator with 100 series HEPA filters when wet or LEV controls used. • Disposable coveralls should be worn when using full-face respirators. • Eye protection should be worn when using a half-face respirator. • Hearing protection should be considered when using powered equipment.	• A water flow rate of 2.3 liters per minute (0.5 gallons/minute) is the recommended minimum for saws equipped with wetting controls. • Caution—water may produce electrocution and slipping hazards. • Slurry cleanup of interior surfaces must be part of the work plan.
Abrasive blasting of concrete surfaces	Exterior and interior concrete surfaces	• Barrier systems are required when dust can be controlled at the source. • Full enclosure system required when source control of dust cannot be established • Blasting units that capture the dust (e.g., shot recycle systems) should be used when practical. • Blast systems that discharge a wet slurry shot should be used when practical. • Personal protective equipment.	• Full-face supplied-air helmet or hood respirator with a neck shroud, operated in continuous-flow mode. • Heavy waterproof protective clothing should be worn. • Hearing protection should be considered when using powered equipment.	• Caution—water may produce electrocution and slipping hazards. • Slurry cleanup of interior surfaces must be part of the work plan.
Cleanup	General cleanup	• Full enclosure systems can be used in dust-sensitive areas or when unprotected workers cannot be restricted from entering cleanup work areas. • Use vacuum (HEPA-equipped) when practical. • Wetting of dust prior to sweeping/scooping to be used when practical. • Planning for bulk/coarse debris cleanup followed by fine-dust cleanup can reduce the amount of dry sweeping. • Dust suppressants should be used if dry sweeping is the only practical option.	• Half-face air purifying respirator when vacuum systems or wet sweeping methods are used. • Full-face or powered air purifying respirator (PAPR) with P100 series HEPA filters for all other cleanup. • Eye protection should be worn when using a half-face respirator. • Hearing protection should be considered when using powered equipment.	• Dust-suppressing agents or absorbents are only marginally effective in minimizing airborne dust during sweeping. • Safe work procedures must be followed. • Rolling a seam of dust suppressant into fine, settled dust is reported to work better than a wide-spread scattering.

SILICA EXPOSURE CONTROL MATRIX

Task		Control methods	Personal protective equipment	Comments
Cleanup	Vacuum bag/filter changing and maintenance of LEV	• Barrier to restrict access to the work area. Signage marking an area removed from other workers may be adequate.	• Half-face air purifying respirator with P100 series HEPA filters. • Eye protection should be worn when using a half-face respirator.	• Safe work procedures must be established and followed. • Many vacuums are designed to collect the dust in a bag (rather than loose in the canister) that can be tied and disposed without generating airborne dust. Any new vacuum systems purchased should have this design feature.
Cutting fibrous cement board		• A variety of dust control options are acceptable: ○ Fiber cement shears ○ Score and snap knife ○ Dust-reducing saws (circular and jig) equipped with HEPA vacuum ○ Wetting method if practical	• Half-face air-purifying respirator with N100 series HEPA filters when using saws. • N95 dust mask when using fiber cement shears indoors.	• A number of equipment manufacturers make saws (and saw blades) specially designed for cutting fiber cement board that can be purchased with HEPA. • Carbide score and snap knives have been shown to be an efficient and productive means of cutting fibrous cement board.

Note:
LEV = Local Exhaust Ventilation
PAPR = Powered Air-Purifying Respirator

EMPLOYEE QUALIFICATION OR ANNUAL REPORT FOR RESPIRATORY PROTECTION PROGRAM

Employee Name: _____

Employee Number: _____

Date: _____

(check one) **New Painters Qualification** **Annual Painters review**

Check and initial each area after completion: Safety Coordinator initial Employee initial

Respirator selection

Respirator Fit Test and Proper Use Training

Respirator Medical Evaluation

Respirator Storage and Training

Respirator and Cartridge Replacement Training

Respirator Cleaning and Training

Inspection of Respirator Procedure Training

I _____, have been trained and have completed all of the Respiratory
(Employee)

Protection Program. I have been trained by _____ and fully understand.
(Safety Coordinator)

Employee Signature: Date:

Safety Coordinator Signature: Date:

EMPLOYEE INSPECTION REPORT FOR RESPIRATORY PROTECTION PROGRAM

Reporting month : _____

Employee: **Employee:** **Employee:**

Respirator Replacement	
Date:	SC Initials

Respirator Replacement	
Date:	SC Initials

Respirator Replacement	
Date:	SC Initials

Respirator Storage	
Date:	SC Initials

Respirator Storage	
Date:	SC Initials

Respirator Storage	
Date:	SC Initials

Cartridge Replacement	
Date:	SC Initials

Cartridge Replacement	
Date:	SC Initials

Cartridge Replacement	
Date:	SC Initials

Respirator Cleaning	
Date:	SC Initials

Respirator Cleaning	
Date:	SC Initials

Respirator Cleaning	
Date:	SC Initials

Safety Coordinator signature: _____
Date: _____

CRANES AND RIGGING INSPECTION FORM

Crane Inspection Record

Type Equipment: _____ **Unit No.:** _____

Location: _____ **Project No.:** _____

Inspected by: _____ **Date:** _____

Indicate by initialing "Yes" if item checked is adequate is operational, and safe. Initial "No" to indicate repair or other action is required. Use NA to indicate "Not applicable".

	Item to be checked	YES	NO	NA
a.	Load line, lubricated, wound properly on drum, condition			
b.	Whip line, lubricated, wound properly on drum, condition			
c.	Hook and safety latches on load block			
d.	Hook and safety latches on headache ball			
e.	Cable at wear points			
f.	Pins in becket			
g.	Wedges installed			
h.	Clamps on dead ends			
i.	Hydraulic lines, no leakage			
j.	Outriggers, outrigger pads and pins			
k.	Lights, turn signals			
l.	Horn			
m.	Engine oil			
n.	Engine water level			
o.	Boom pins			
p.	Cotter pins			
q.	Steering			
r.	Tires			
s.	Controls, check operation in all motions			
t.	Brakes			
u.	Instruments			
v.	Load chart in place, legible			
w.	Windshield, clean, wipers functional			

Note defects found must be repaired prior to equipment use. On completion of inspection, retain this form with the equipment till the end of the workday. Then turn in to immediate supervision for filing.

_____

_____

_____

_____

_____ _____

Signature of Person Completing Repairs Date Repaired

BUCKET TRUCK CHECKLIST

NAME:			
DATE			
FINDING:			
ACTION:			
		Acceptable	Deficent
Check Gas (if at ½ tank or under, top off)			
Check Oil Level			
Check Coolant Level in Radiator; Hose Condition			
Check Power Steering Fluid Level; Hose Condition			
Check Windshield Washer Fluid Level			
Check Transmission Fluid Level			
Check Brake Fluid			
Check Horn			
Check All Lights			
Check Tire Pressure			
Check Windshield Wipers			
Check Mirrors and Windshield			
Check Emergency Equipment (2 tire blocks, 6 cones, 2 flagger vests, flags, first aid kit)			
Check Hydraulic Fluid Level			
Check Controls at Platform and Lower Controls for Proper Operation; Inspect for Leaks in Hydraulic System			
Check for Evidence of Physical Damage			
Check to Make Sure You Have the Key for the Bins			
Is the Bucket Truck Clean Inside/Outside			
Verify that Operator's Manual is Located in Bucket Truck			
Verify that Fall Protection Equipment is Located in the Bucket Truck and Inspected			
Strap for Boom/Bucket and Bucket Cover			
Test and Verify Back-up Alarm is Functional			

Note defects found must be repaired prior to equipment use. On completion of inspection, retain this form with the equipment till the end of the workday. Then turn in to immediate supervision for filing.

Signature of Person Completing Repairs

Date Repaired

SAFETY TRAINING MATRIX

T Class	Class Name	When required	Training Medium	Training Conducted	Re-Evaluation	Who Needs It:	Length of Class	Practical	Who requires it	Regulations for Reference
T-1	Accident Investigation Class	60 days of becoming supervisor of others	**Power Point & Field Assessment**	Classroom/Field	2 years	Branch Committee Chairman	2	1	FSG	FSG Safety Policy
T-2	Electrical Hazard Awareness	Time of Assignment	**Flash Drive & Field Assessment**	Classroom/Field	3 year	All employees	2.5	1	OSHA	29 CFR 1926.400 & NFPA 70E, FSG Policy
T-3	Confined Space Entrant/ Attendant	Before Entry	**Power Point & Field Assessment**	Classroom/Field	3 years	Employee working in a confined space or helping entrants outside the space	2	1	OSHA	29 CFR 1926 Subpart AA
T-4	Confined Space Competent Person	Before Entry	**Outside & Field Assessment**	Classroom/Field	3 years	All supervisors	2	1	OSHA	28 CFR 1926 Subpart AA
T-5	CPR/First Aid	60 days of hire	**Outside & Field Assessment**	Classroom	2 years	All required employees	3	1	OSHA	29 CFR 1926.50 &1926.23
T-6	Excavation Awareness	Time of hire	**Flash Drive & Field Assessment**	Classroom/Field	5 years	Any employee working in or around excavations	1	1	OSHA	29 CFR 1926.650
T-7	Fall Protection	Time of hire	**Flash Drive & Field Assessment**	Classroom/Field	3 years	An employee exposed to a fall hazard	1	1	OSHA	29CFR1926.503
T-8	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-9	Electrical Safe Work, NFPA 70E Meter Proficiency Lockout / Tagout	Time of Assignment	**NFPA 70 E Level 3 and 4 Power Point**	Classroom/Field	3 year	**All Level 1 & 2 Employees**	4	2	OSHA	29 CFR 1926.400 & NFPA 70E
T-10	Job Hazard Analysis	Time of Hire	**Power Point & Field Assessment**	Classroom/Field	2 years	All employees	0.5	0.5	FSGE	FSG Safety Policy
T-11	Articulating Boom (Knuckle) Lifts	Before first use	**Power Point & Field Assessment**	Field	5 years	Any employee using a boom lift	2	1	OSHA	29 CFR 1926.453
T-12	Ladder Protection	Time of Hire	**Flash Drive & Field Assessment**	Classroom/Field	2 year	All employees	1	1	OSHA	29 CFR 1926.501
T-13	Electrical Safe Work, NFPA 70E Meter Proficiency Lockout / Tagout	Time of Assignment	**Flash Drive & Field Assessment**	Classroom/Field	3 year	**All Level 3 & 4 Employees**	2	1	OSHA	29 CFR 1926.400 & NFPA 70E, FSG Policy
T-14	Forklifts (Lull) - Construction	Before first use	**Power Point & Field Assessment**	Classroom/Field	3 years	Any employee operating a construction forklift	4	1	OSHA	29 CFR 1926.602(d)
T-15	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-16	OSHA 10 Hour	60 days of hire	**Trainer Power Point**	Classroom	3 years	All supervisors, project managers, and estimators	11.5	0	OSHA	29 CFR 1926.21 & General Duty Clause
T-17	Powder Actuated Tools	Time of Hire	**Outside & Field Assessment**	Classroom/Field	5 years	Any employee using powder actuated tools	0.5	0.5	OSHA	29 CFR 1926.302

T Class	Class Name	When required	Training Medium	Training Conducted	Re-Evaluation	Who Needs It:	Length of Class	Practical	Who requires it	Regulations for Reference
T-18	Proper Lifting Procedures	Time of hire	**Power Point & Field Assessment**	Classroom/Field	3 years	Field and Warehouse Personnel	0.5	0.5	FSG	FSG Safety Policy
T-19	Scaffolding Awareness	Time of Hire	**Power Point & Field Assessment**	Classroom/Field	5 years	Any employee working on and/or exposed to scaffolds	0.5	0.5	OSHA	29 CFR 1926.454
T-20	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-21	Scissor Lifts	Before first use	**Outside & Field Assessment**	Field	5 years	Any employee using a scissor lift	2	1	OSHA	29 CFR 1926.453
T-22	FSG Driving Course	Before first use	**Travelers Course & Field Assessment**	Classroom/Field	2 year	Anyone that drives a Company Owned Vehicle	0.5	0.5	FSG	FSG Safety Policy
T-23	Excavation Competent Person	Time of Assignment	**Outside & Field Assessment**	Classroom/Field	3 years	Operator, Superindent, Foreman and Lead Man	4	2	OSHA	29 CFR 1926.650
T-24	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-25	Crane Operator Certified	Before first use	**Outside & Field Assessment**	Classroom/Field	5 years	Aerial Tech Operating Crane over 2,000 lbs	32	8	OSHA	29 CFR 1926.1427 Subpart CC
T-26	OSHA 30 Hour	60 days of becoming supervisor of others	**Trainer Power Point**	Classroom	4 years	Any supervisor on a project that requires it	30	0	FSG	Some General Contractors
T-27	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**

T Class	Class Name	When required	Training Medium	Training Conducted	Re-Evaluation	Who Needs It:	Length of Class	Practical	Who requires it	Regulations for Reference
T-28	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-29	Hazard Communication (HazCOM, GHS)	Time of Hire	**Power Point & Field Assessment**	Classroom/Field	5 years	All employees	1	1	OSHA	29 CFR 1910.1200 & 1926.59
T-30	Equipment	Before first use	**Power Point & Field Assessment**	Field	5 years	Any employee operating equipment: bucket truck, trencher, etc.	1	1	FSG	FSG Safety Policy
T-31	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**	**Blank**
T-32	Silica and Respiratory Protection	Time of Assignment	**Class Room & Field Assessment**	Classroom/Field	2 year	All employees	1.5	0.5	OSHA	29 CFR 1910.134 29 CFR 1926.103
T-33	Daily Safety Management Class	60 days of becoming supervisor of others	**Power Point & Field Assessment**	Classroom/Field	5 years	All Field Supervisors and PM's	0.5	0.5	FSG	FSG Safety Policy
T-34	Backhoe	Before first use	**Power Point & Field Assessment**	Field	5 years	Any employee operating a backhoe	4	2	OSHA	29 CFR 1926.602(a)
T-35	Forklifts - Industrial	Before first use	**Power Point & Field Assessment**	Classroom/Field	3 years	Any employee operating an industrial forklift	4	1	OSHA	29 CFR 1926.602(d)
T-36	OSHA 500 Series	Time of Hire	**Outside & Field Assessment**	Classroom	4 years	Regional Safety & Risk Manager	80	0	OSHA	OTI Training Center

Re-evaluation: Employees should be able to demonstrate proficiency in the subject matter to requalify. Testing should be done in the field and any major deficiencies in skills or knowledge will warrant retraining in a class room setting.

TRAINING LOG

Subject:	Date:
Division:	Course Hours:
Instructor:	

	Employee Name (Please Print)	Employee Number	Department	Employee Signature
1				
2				
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BLOOD AND BODY FLUID EXPOSURE REPORT

Employee Name:				**Date of Birth:**	
	Last	**First**	**MI**		
SSN:		**Employee #:**		**Dept. #:**	
Job Title:					

Hepatitis B Vaccination status:	☐ Series complete		☐ In process		☐ Denied		
Injection Dates:	#1		#2		#3		
Date of Exposure:							
Date Exposure Reported:							

Time of Exposure (Approximate, if unknown):		
Responsible Person:	☐ Yes	☐ No
Good Samaritan:	☐ Yes	☐ No
Description of the Incident: (Include causes, where and how it occurred, and body parts involved.)		
Body Fluids Involved:	☐ Yes	☐ No
Exposure was to:	☐ Non-Intact Skin	☐ Intact Skin
Exposure source known?	☐ Yes	☐ No
Consent obtained for HIV/HBV testing? (If yes, attach nameless copy of lab results to this form.)	☐ Yes	☐ No
Indicate type of Personal Protective Equipment (PPE) used for this procedure:	☐ Glove ☐ Mask ☐ Gown	☐ Goggles ☐ None ☐ Other
Was the PPE available for your use: If NO, indicate why not:	☐ Yes ☐ Don't know	☐ No ☐ N/A

Referred to:		Phone:	
Additional Comments:			
Completed?	☐ Injury/Illness Report ☐ OSHA 300 Log ☐ First Report of Injury (Workers' Compensation Claim Form)		

Name of Preparer (print)	Title of Preparer	Date Form Completed

DECLINATION VACCINE FORM

Hepatitis B Vaccine Declination Form

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

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

Name of Employee (print)	Employee Number
Signature of Employee	Date Signed

AERIAL LIFT INSPECTION FORM

LIFT ID or Serial#: _____ **Inspector:** _____

Job #: **Week Beginning:**

Instructions:
Each aerial lift will be operationally tested and visually inspected each day. The designated inspector will place a (√) in the appropriate box when an item passes inspection. Leave the box empty and note a brief description of any problem. Do not use the lift - and immediately notify supervisor when aerial lift deficiencies are identified.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Maintenance Needed
Boom/Hoist (Visual)								
Hydraulic Leaks								
Extension Chain & Pivot Pins								
Electrical Lines								
Basket Cage and Gate								
Anchorage Points								
Base (Visual)								
Broken, Cracked or Loose Parts								
Leaks								
Electrical								
Tires & Outriggers								
Back Up Alarm & Manual								
Engine Compartment (Visual)								
Oil Level								
Fuel Level								
Belt, Hose & Motor Condition								
Battery & Electrical								
Operating Controls (Operational)								
Emergency Stop & Brakes								
Base Operational Controls								
Basket Operational Controls								
Foot Controls (if applicable)								
Safety Signs (legible)								

Addition Notes:

Foreman Signature: _____ **Date:** _____

DOCUMENT CONTROL

MASTER SAFETY PROCEDURES					
Policy	**Description of Change**	**Rationale for Change**	**Author**	**Effective Date**	**Revision/ Date**
SMS-TC Table of Contents	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-DC Document Control	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-001 Executive Summary	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-002 Roles Responsibility	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-003 Safety Program	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-004 Incident Procedure	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-005 Energized Safe Work	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-006 Temporary Electrical Procedure	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-007 Lockout/Tagout	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-008 House Keeping and Sanitation	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-009 Haz-Com	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-010 Ladders	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-011 Scaffolding	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-012 Confined Space	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-013 Excavation and Trenching	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-015 Tool	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-016 Vehicle Fleet Policy	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-017 Silica and Respiratory	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-018 Crane and Bucket	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-019 Training Procedure	New Procedure	Updated to OHSAS 18001	FSG Safety Council	03/08/2018	

SMS-020 First Aid and BBP	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-021 Fall Protection and Rope Access	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	
SMS-022 Aerial Lift Inspection	New Procedure	Updated to OHSAS 18001	FSG Safety	03/08/2018	

MASTER SAFETY FORMS					
Policy	Description of Change	Rationale for Change	Author	Effective Date	Revision/ Date
APX-DC Document Control	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-001	No Form	No Form	No Form	No Form	No Form
APX-002	No Form	No Form	No Form	No Form	No Form
APX-003A Start-Up Safety Checklist	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-003B Job-Site Safety Plan	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-003C Progressive Discipline Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-003D Job Site Safety Temp	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-003E Job Site Safety FSG Employee	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-003F Job Hazard Analysis	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004A First Report of Injury	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004B Declination of Treatment	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004C Incident/Accident Root Cause Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004D Witness Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004E Driver Evaluation	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004F Near Miss Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	

APX-004G Injury Protocol	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004H Return To Work	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-004I Incident Accident Training	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005A Energized Work JHA	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005B Energized Electrical Permit	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005C MOP	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005D One Line	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005E Energized Safety Matrix	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005E1 NFPA 70E 130.7(C)(16)	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005E2 NFPA 70E Table 130	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005F OSHA Live Work Interpretation Letter	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005G Pronto Electrical Field Knowledge Assessment	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005H Branch Circuit Checklist	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-005I Commissioning Checklist	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-006A Temporary Electrical Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-006B Assured Grounding Program Code	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-007 LO/TO Log	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-008	No Form	No Form	No Form	No Form	No Form
APX-009A Master List of SDS Chemicals	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-010	No Form	No Form	FSG Safety	No Form	No Form

APX-011	No Form	No Form	FSG Safety	No Form	No Form
APX-012A Confined Space Determination	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-012B Confined Space Permit	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-012C Non Permit Required Confined Space	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-013A Excavation and Trenching	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-014A Daily Forklift Checklist	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-015A Standard Interpretation	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-015B Standard Interpretation	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-016A Monthly Vehicle Inspection	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-017A Silica Exposure Control Matrix	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-017B Employee Qualification/Annual Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-017C Employee Inspection Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-018A Cranes and Rigging Inspection	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-018B Bucket Truck Checklist	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-018C MUTCD	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-019A Training Matrix	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-019B Training Log	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-020A Exposure Report	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	
APX-020B Declination of Vaccine	New Form	Updated to OHSAS 18001	FSG Safety	03/08/2018	

MASTER SAFETY TRAINING					
Policy	Description of Change	Rationale for Change	Author	Effective Date	Revision/Date
T-1 Accident Investigation	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-1A Accident Investigation Fact Sheet	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-1B How to Conduct an Accident Investigation	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-2 Electrical Hazard Awareness	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-3 Confined Space Training	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-3A Confined Space Manholes	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-3B Confined Space Pits	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-3C Confined Space Sewer	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-3D Confined Space 911	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-4 Confined Space Competent Person	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-5 CPR/First Aid	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-6 Excavation and Trenching	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-6A Excavation and Trenching Fact Sheet	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-7 Fall Protection	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-8	Future Training	Future Training	FSG Safety		
T-9 ESWP Level 1&2	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-10 JHA	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-11 Articulating Boom (Knuckle) Lifts	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-12 Ladder Protection	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	

T-13 ESWP Level 3&4	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-14 Forklifts (Lull) Construction	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-15	Future Training	Future Training	FSG Safety		
T-16 OSHA 10-Hour	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-17 Powder Actuated Tools	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-18 Proper Lifting	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-18A OSHA Proper Lifting	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-19 Scaffold Awareness	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-19A OSHA Scaffold Safety	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-20	Future Training	Future Training	FSG Safety		
T-21 Scissor Lift	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-22 FSG Driving Course	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-23 Excavation Competent Person	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-24	Future Training	Future Training	FSG Safety		
T-25 Crane Operator Certification	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-26 OSHA 30	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-27	Future Training	Future Training	FSG Safety		
T-28	Future Training	Future Training	FSG Safety		
T-29 GHS Training	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-29A OSHA Haz-Com Wallet Card	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-29B OSHA NFPA vs. GHS	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-29C OSHA Quick Card Label	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	

T-29D OSHA Quick Card Pictogram	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-29E OSHA Quick Card SDS	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-30 Equipment Training	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-31	Future Training	Future Training	FSG Safety		
T-32 Silica & Respiratory	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-32A Crystalline Fact Sheet	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-33 Daily Safety Management	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-34 Backhoe Operation	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-35 Industrial Forklifts	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	
T-36 OSHA 500 Series	New Training	Updated to OHSAS 18001	FSG Safety	03/08/2018	

MASTER ARCHIVED LIST SAFETY DOCUMENTS					
Policy	Description of Change	Rationale for Change	Author	Effective Date	Revision/Date