INJURY & ILLNESS PREVENTION PROGRAM

Abridged Version:
Indexes and Select Sections

Full Safety Manual is located at each jobsite and available on request.

IIPP-(SE) VERSION 2.3

01-04-2022

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PROVIDED AND REQUIRED FOR
ALL SOLV Energy JOBSITES

HEADQUARTERS – San Diego
SOLV Energy, LLC
16680 W Bernardo Drive
San Diego, CA 92127
(858) 251-4888

Offices in:
CALIFORNIA OREGON
NORTH CAROLINA

For further information contact:

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IIPP is a guideline based on CA laws, regulations, and standards. When used in other states, appropriate changes are made to reflect that state's laws, regulations, and standards.

Where a conflict may exist, the most updated version of this publication is available on the intracompany Safety Site

INJURY ILLNESS PREVENTION PROGRAM

(Corporate Safety Manual)

Rev 2023

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PROVIDED AND REQUIRED FOR ALL SOLV ENERGY JOBSITES

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This IIPP contains guidelines based on California Title 8 Code of Regulations. When used in other states, appropriate changes are made to reflect that state's laws, regulations, and standards. Where a conflict may exist, the most updated version of this publication is available on the intracompany site, The Grid, at IIPP.

As employers in the construction industry, specific standards are found in the Federal Construction Safety Orders 1910 & 1926 where there is not a state-specific OSHA. At project sites or during activities for which no specific safety orders exist, the General Industry Safety Orders (GISO's) apply.

For additional assistance, contact your Regional Safety Manager or the SOLV Safety, Environmental, and Health Department.

The Safety Hot Sheets are available on SOLV Energy's internal, online safety page.

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CA License
#1083807

January 4, 2023

SAFETY: A CORE VALUE

The health and well-being of our employees and the general public are first and foremost above all other considerations at all of our construction sites.

This Injury & Illness Prevention Program Manual is presented to you in order to emphasize our Company's dedication to providing a safe work environment. Familiarize yourself with the contents of this manual so that you can understand and comply with instructions and procedures outlined herein.

Employee incidents and injuries also affect job costs as much as any other component of the work. Our Worker's Compensation Insurance premiums are determined solely by the safety results of our own operations. Your efforts to reduce injuries or eliminate them altogether, directly impact our premiums, and therefore help control job costs.

It is the responsibility of each of us to see that our employees are provided with the proper safeguards and are instructed, educated and required to work in a safe manner at all times. "Shortcuts" must not be allowed, as they cost everyone more in the long run.

Regards,

George W. Hershman
Chief Executive Officer
SOLV Energy, LLC

Contact

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SECTION A:

SITE-SPECIFIC
CODE OF SAFE PRACTICES

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Responsibility

SOLV Energy recognizes that responsibilities for safety and health must be decentralized to be effective and therefore, has not vested total safety responsibility in a single individual. The organization of Safety Responsibilities is outlined in the beginning of our IIPP along with a policy statement from our CEO, George Hershman.

The Injury and Illness Prevention Program (IIP Program) administrator, Michael Darling, Vice President, Safety, Environment and Health, has the authority and responsibility for implementing the provisions of this program for SOLV Energy

All managers and supervisors are responsible for implementing and maintaining the IIP Program in their work areas, sites, and offices and for answering worker questions about the IIP Program.

Compliance

Management is responsible for ensuring that all safety and health policies and procedures are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the rules fairly and uniformly. Employees are expected to follow the direction of their managers and supervisor, and to comply with all safety policies and direction.

All employees are responsible for using safe work practices, for following all directives, policies, and procedures, and for assisting in maintaining a safe work environment. All employees both SOLV Energy and Sub-Contractors have Stop Work Responsibility.

Our system of ensuring that all workers comply with the rules and maintain a safe work environment include:

1. Informing workers of the provisions of our IIP Program.
2. Evaluating the safety performance of all workers.
3. Recognizing employees who perform safe and healthful work practices.
4. Providing training to workers whose safety performance is deficient.
5. Disciplining workers for failure to comply with safe and healthful work practices.

The General Safety Provisions of the IIPP Manual and the SOLV Employee Manual outline disciplinary actions that may be taken in the event an employee violates a safety rule or company policy that could result in serious injury. Training may be required because of enforcement activity. SOLV Energy may use disciplinary actions up to termination for failure to follow safety policy and procedure. Employees many be given verbal warnings or time off depending on the significance of the action.

Safety Communication

We recognize that open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of

safety and health information between management and staff in a form that is readily understandable and consists of one or more of the following checked items:

1. Employees are given a site-specific orientation on their first day before their job assignment.
2. Employees are given task specific training through OJT, mentoring, classroom, LMS or outside seminar or class. Any single method listed above, or combination may be used depending on task.
3. Workers review a JHA (Job Hazard Analysis) and participate in a PTP (Pre-Task Plan) before their assigned work begins.
4. Weekly Toolbox Meetings are held as described in the Toolbox Meetings section.
5. Electronic bi-weekly training using Workday is available to assigned workers.
6. All employees and sub-contractors are encouraged to actively communicate by reporting Near Miss incidents to the Site Safety Manager and/or their direct supervisor, and exchange helpful ideas that could improve overall Project Safety. Sunscreen is a company provided tool to accomplish this in addition to verbal and written communication.
7. Meeting minutes are maintained on site. Workers may exchange and discuss items without fear of reprisal.

All employees and site workers have the right to request training on assigned task and to report or share hazards without reprisal.

Hazard Assessment

Periodic inspections to identify and evaluate workplace hazards shall be performed by the following competent Designated Safety Persons (DSP), Site Safety Managers or Corporate Safety personnel in our offices, construction sites or O&M facilities. This DSP will be appointed by the supervisor assigned to the site or office.

Periodic inspections are performed according to the following schedule:

1. When we initially established our IIP Program.
2. When new substances, processes, procedures, or equipment which present potential new hazards are introduced into our workplace.
3. When new, previously unidentified hazards are recognized.
4. When occupational injuries and illnesses occur.
5. When we hire and/or reassign permanent or intermittent workers to processes, operations, or tasks for which a hazard evaluation has not been previously conducted.
6. Whenever workplace conditions warrant an inspection.

Superintendents may choose to use their Daily Logs to document safety efforts. Subcontractor concerns are addressed in weekly coordination meetings. Inspections of work areas shall be made at the beginning of work operations and as circumstances change or affect working conditions.

Inspections should focus on any new hazards, equipment, tooling or change in procedure. Abatement of imminent hazards must be put into effect immediately and other minor concerns addressed as soon as practical given jobsite conditions.

Accident / Injury Investigations

All Incidents and Injuries will be reported to the Site Superintendent, Regional Manager and Site Safety Manager as soon as possible. Injuries that result in medical attention require a Risk Alert. Care of the injured is the priority.

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Visiting the site / scene as soon as possible.
2. Interviewing injured workers and witness.
3. Examining the workplace for factors associated with the accident / Injury exposure.
4. Determining the cause of the accident / exposure
5. Taking corrective actions to prevent the accident / injury from reoccurring.
6. Recording the findings and corrective actions taken.

A draft Incident / Injury report will be given to the Superintendent within 24 hours of the Incident.
This report can be generated by either site personnel or the corporate safety staff. SOLV Energy will notify the owner as soon as possible of any incident involving property damage or personal injury that occurs on site and will follow up with investigation reports upon availability. *Post-Incident drug testing may require. See HR for additional information.*

Incidents resulting in injury that requires off site treatment will be reported to corporate safety as soon as the injured person is stabilized, and care given. A written Incident Report will be completed in 72 hours. Care is the priority. No injured person requiring medical care will leave the site unescorted by their immediate supervisor or a designee. **A Risk Alert** will be generated as soon as possible to notify SOLV Energy Management.

Any admission to a hospital or death requires notification to OSHA within 8 hours. *First Aid cases should be administered On-Site using a medical service if possible. A Risk Alert will be generated as soon as possible.*

Incident investigation(s) will be handled by each Subcontractor using its own internal reporting system. A copy of this report will be submitted to the Superintendent as described above.

Incident investigations involving hazardous materials or wastes will be handled jointly by each Subcontractor and the Superintendent. This is to assure that the cause of the Incident is completely
determined, and proper precautions implemented for other activities in the area or performing similar work, and the information is relayed to other Subcontractors.

An Incident/ Incident Review Conference will be held after all facts are gathered for the final Incident investigation. This review should include the injured employee, his/ her partner, or coworker (if involved), subcontractor supervisor, safety manager and the SOLV Energy project team members as appropriate to determine the root cause and any

additional measures that need to be taken to ensure that the injurious situation is not repeated.

Hazard Correction

Daily and periodic Safety Inspections are performed to identify new or existing hazards by site personnel and/or corporate safety staff. Checklists are provided for documenting inspections. The CMiC or Sunscreen applications may be used by computer, iPad, iPhone or Android device to log unsafe conditions.

All site personnel have Stop Work Responsibility and are encouraged to inform their direct supervisor to immediately address any hazards. The Stop Work Responsibility process works in this manner:

1. When an employee or contractor identifies a condition or behavior that poses imminent danger to workers or equipment – they notify their supervisor of the risk. If a supervisor is not immediately available work can be stopped until they are located. Professional behavior is expected, Combative and/or unprofessional behavior is not tolerated.
2. Fellow workers or site personnel exposed to the hazard are notified.
3. Affected personnel will discuss the situation and either resume work or bring in mitigating equipment, tooling, PPE, training, or personnel to address the hazard before work resumes.
4. Corrections will be documented on the JHA.
5. Work will resume.

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazard. Once a hazard is identified, work will stop. When an imminent hazard exists that cannot be immediately abated without endangering employee(s) and/or property, all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with necessary protection and/or training. All actions will be documented on the appropriate forms.

Hazard corrections may include:

1. Additional tooling, equipment, training, PPE, or personnel added to mitigate the hazard.
2. Generating a JHA if it is a new hazard.
3. Updating the Job Hazard Analysis (JHA) and Pre-Task Planning if it is a hazard not recognized on an existing task.
4. Retraining the crews to new procedures, processes, tooling, equipment, PPE or other mitigation issues.

Sunscreen and/or CMiC may be used to input a Safety Issue and a person assigned to mitigate the work condition before work resumes. The issue will then be formally closed before work begins.

Training

All workers including managers and supervisors will be given training and instruction

on general and job-specific safety and health practices. All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. *All employees may request a written copy of training which will be delivered within 5 days.* Training and instruction shall be provided as follows:

1. When the IIP Program is first established.
2. To all workers given new job assignments for which training has not previously provided.
3. Whenever new substances, processes, procedures, or equipment are introduced to the workplace and represent a new hazard.
4. Whenever the employer is made aware of a new or previously unrecognized hazard.
5. To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed.
6. To all workers with respect to hazards specific to each employee's job assignment.

In addition, we provide specific instructions to all workers regarding hazards unique to their job assignment, to the extent that such information was not already covered in other training.

Construction site workers are given initial Safety Training and site-specific orientation upon hire. This training is given in person with the use of visual aids and may include computer-based training. This training consists of:

1. Explanation of the employer's IIP Program and measures for reporting any unsafe conditions, work practices, injuries and when additional instruction is needed.
2. Use of appropriate clothing, including gloves, footwear, and personal protective equipment.
3. Information about chemical hazards to which employees could be exposed and other hazard communication program information.
4. Availability of toilet, handwashing and drinking water facilities.
5. Provisions for medical services and first aid including emergency procedures.
6. Additional training is provided during toolbox sessions or as job conditions dictate, such as when reassigned or new hazards are identified.

Training needs of employees are evaluated when new substances, process, procedures or equipment is introduced to the workplace by a assigned company trainer. New hazards are addressed through the JHA and PTP process as needed.

Employees are given OJT (On the Job Training) for most tasks. Employees may be certified for specific equipment by a company approved trainer according to their assignments. Employees are given training for the specific task assigned. Demonstration of skill is done by the direct supervisor before the person is assigned to a task.

Training can be combination of OJT (On the Job Training), computer based, in person, visual aids or using written documentation depending on the job assigned. Demonstration of skill will be emphasized to determine the competence of the employee. Documentation showing the completion of training will be completed and filed for review.

Superintendents, Area Leads, Leads and Foremen continuously evaluate worker safety

performance to determine the need for additional training. Supervisors receive training in Safety and Hazard recognition at regular training sessions. Craft workers may receive safety training as part of their union apprenticeship program.

LIST OF TRAINING SUBJECTS

We train our workers about the following checked training subjects where applicable to their assigned duties:

- ☐ The employer's Code of Safe Practices.
- ☐ Confined spaces.
- ☐ Safe practices for operating assigned equipment.
- ☐ Good housekeeping, fire prevention, safe practices for operating any construction equipment.
- ☐ Safe procedures for cleaning, repairing, servicing, and adjusting equipment and machinery.
- ☐ Safe access to working areas.
- ☐ Protection from falls.
- ☐ Electrical hazards, including working around high voltage lines.
- ☐ Crane operations.
- ☐ Trenching and excavation work.
- ☐ Proper use of powered tools.
- ☐ Guarding of belts and pulleys, gears and sprockets, and conveyor nip points.
- ☐ Machine, machine parts, and prime movers guarding.
- ☐ Lock-out/tag-out procedures.
- ☐ Materials handling.
- ☐ Power tool operation.
- ☐ Landing and loading areas, including release of rigging, landing layout, moving vehicles and equipment, and log truck locating, loading and wrapping.
- ☐ Fall protection from elevated locations.
- ☐ Use of elevated platforms, including condors and scissor lifts.
- ☐ Driver safety.
- ☐ Slips, falls, and back injuries.
- ☐ Ergonomic hazards, including proper lifting techniques and working on ladders or in a stooped posture for prolonged periods at one time.
- ☐ Personal protective equipment.
- ☐ Respiratory Equipment.
- ☐ Hazardous chemical exposures.
- ☐ Hazard communication.
- ☐ Physical hazards, such as heat/cold stress.
- ☐ Laboratory safety.
- ☐ Bloodborne pathogens and other biological hazards – task specific
- ☐ LOTO (Lock-out-Tag-out / Block O

Employee Access to the IIPP

SOLV Energy employees – or their designated representatives – have a right to examine and receive a copy of our IIPP. This copy will be given free of charge, if additional copies of the IIPP within one (1) year and has not been updated with the new information since the prior copy was provided, SOLV may charge reasonable, non-discriminatory reproduction costs for the additional copies. This copy will be no later than five (5) business days after the request for access is received from an employee or designated representative. This will be accomplished by:

1. Access to our company SharePoint site where the current copy can be viewed, printed or downloaded.
2. Access to the site or office binders which may viewed or copied.
3. Emailed electronically to the employee or their representative.

Any copy provided to an employee, or their designated representative need not include any of the records of the steps taken to implement and maintain the written IIP Program.

Where we have distinctly different and separate operations with distinctly separate and different IIPPs, we may limit access to the IIPP applicable to the employee requesting it.

An employee must provide written authorization to make someone their "designated representative." A recognized or certified collective bargaining agent will be treated automatically as a designated representative for the purpose of access to the company IIPP. The written authorization must include the following information:

1. The name and signature of the employee authorizing the designated representative.
2. The date of the request.
3. The name of the designated representative.
4. The date upon which the written authorization will expire (if less than 1 year).

Recordkeeping

Records are kept documenting safety and health training using the name given on their hiring paperwork. This training is both kept on-site and sent to the SOLV Safety Administrator for filing. Records of hazard assessment inspections, including the person(s) or persons conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded either with paper audit sheets or via Sunscreen.

Documentation of safety and health training for each worker, including the worker's name or other identifier, training dates, type(s) of training, and training providers are recorded on a worker training and instruction form. We also include the records relating to worker training provided by a construction industry occupational safety and health program approved by Cal/OSHA or other entities (for example NFPA, CPR-First Aid, etc.)

Training records are kept for one year, except for; training with expiration dates for over one year (these records are retained until they expire), training records of employees who have worked for less than one

year that are provided to the worker upon termination of employment

The training records will have the name of the instructor (any certifications), type of training, date and may result in a certificate or card which will be issued to the employee. Any certificates or cards will also be copied, and records maintained by the Safety Administrator. All training cards and certificates are valid only under the supervision of SOLV. Third party documentations (example: OSHA 10, 30 or CPR First Aid are valid under statue). These training forms and documentation will be available upon request.

SECTION B:

EMERGENCY MEDICAL SERVICES
&
CRISIS MANAGEMENT PLAN

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SOLV
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SECTION L:

TRAINING PROGRAMS (ADDITIONAL)

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TRAINING PROGRAM

A variety of safety training shall be held during the course of any SOLV Energy, LLC/ Affiliate project.

Orientation
At the time of employment, all workers are issued any necessary personal protective equipment and a copy of our Employee Safety Manual. This manual consists of general safety rules to be followed by all SOLV Energy, LLC/Affiliate employees.

Ongoing Safety Training - Craft
The SOLV Energy, LLC Safety Department has developed a large variety of Safety Training Modules to be used in "the field." Enclosed in this manual are some of the more common training programs. This includes Confined Space, Fire Extinguisher, and Fall Protection. For a complete list of available training modules and videos refer to the following pages in this section.

Instruction of the safety training maybe accomplished in several different ways. Either by using experienced supervisory personnel, safety representative, outside speaker or a combination of the aforementioned.

Safety training modules may be obtained through the SOLV Energy, LLC Safety Department. Your Safety Department must be notified at least four days in advance to insure delivery of all training material.
For further information regarding this, contact the Safety Department, at (925) 602-6440.

Documentation of all training is an OSHA requirement. This is accomplished by using Exhibit 8A, Training Attendance Roster.

Should certification cards or certificates be required, i.e. First Aid, Competent Person Training etc., advance notice must be given to the Safety Departments Administrative Assistant.
Information needed shall include date of training, employee's name and social security number.

Ongoing Safety Training – Supervision
Supervision training shall be held on a bi-monthly basis at a predetermined location. Notification shall be made to all supervisors approximately one week in advance. Advanced safety techniques shall be taught during these training sessions. It is helpful if supervisory personnel bring their IIPP manuals to these meetings for revision updates.

Documentation
Records of safety orientation, toolbox, or other safety training meetings shall be maintained at the jobsite. Print Exhibit 8A, Training Attendance Roster.

OSHA Requirements
OSHA's safety training requirements is below.

OSHA ON TRAINING IN CONSTRUCTION Reference
OSHA Standards for the Construction Industry 29 CFR, Part 1926. Training Requirements in OSHA Standards and Training Guidelines #2254 Excel, Vol. 3/No. 4, C.E.C.S.

Purpose
This guide provides a basic outline of OSHA's construction safety training and is not all-inclusive.

Scope
Not only is safety training required by OSHA, but it is vital to the success of a contractor in terms of quality and productivity. It should never be assumed that workers understand even the smallest details. Training is necessary for the orientation of new employees to their jobs. (Good work habits are easy to teach, but bad habits are tough to break.) Ongoing training and retraining are needed for existing employees to review and renew existing safety related skills and knowledge. Spending the necessary time and money up front and throughout will pay dividends in the future.

OSHA Standards Specify Training in Many Areas
It is essential to keep a record of all safety and health related training. Records can provide evidence of the employer's good faith and compliance with OSHA standards. Documentation can also supply an answer to one of the first questions and incident investigator will ask: "Was the injured employee trained to do the job?" Failure to provide and document training can result in citations and fines.

OSHA states in 1926.20(b)(4): "The employer shall permit only those employees qualified by training or experience to operate equipment or machinery. Qualified means one who, by possession of a recognized degree, certificate, or professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project."

1926.21(b)(2): "The employee shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury." Note: When a question of training is not specific as shown in one of the standards, OSHA will most likely use the above paragraph.

Construction OSHA Training Standards

Subpart C – General Safety and Health Provisions
General Safety And Health Provisions, Safety Training and Education, Employee Emergency Action Plans

ubpart D – Occupational Health and Environmental Controls
Medical Services and First Aid, Ionizing and Nonionizing Radiation, Gases Vapors Fumes Dusts and Mists, Asbestos, Hazard Communication, Lead in Construction

Subpart E – Personal Protective and Lifesaving Equipment
Hearing Protection, Respiratory Protection

Subpart F – Fire Protection
and Prevention Fire Protection

Subpart G – Signs, Signals and
Barricades Signaling

Subpart I – Tools-Hand and Power
Power Operated Hand Tools, Woodworking Tools

Subpart J – Welding and Cutting
Gas Welding and Cutting, Arc Welding and Cutting, Fire Prevention, Welding Cutting and Heating in Way of Protective Coatings

Subpart K – Electrical
Electrical and Ground Fault Protection

Subpart L –
Scaffolding

Subpart M – Fall Protection
Guarding Low-Pitched Roof Perimeters during Performance of Built-up Roofing Work, Fall Protection

Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors
Cranes and Derricks, Material Hoists-Personnel Hoists and
Elevators

Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations
Material Handling Equipment, Site Clearing

Subpart P – Excavations
General Protection Requirements (Excavations, Trenching and Shoring)

Subpart Q – Concrete and Masonry Construction
Concrete and Masonry Construction

Subpart R – Steel Erection
Bolting, Riveting, Fitting-up and Plumbing

Subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air
Underground Construction, Compressed Air

Subpart T – Demolition
Preparatory Operations, Chutes, Mechanical Demolition

Subpart U – Blasting and Use of Explosives
General Provisions, Blaster Qualifications, Surface Transportation of Explosives, Firing the Blast

Subpart V – Power Transmission and Distribution
General Requirements, Overhead Lines, Underground Lines, Construction in Energized Substations, Ladders

Subpart X – Stairways and Ladders
Stairways, Ladders

Subpart Y – Diving
Qualifications of Dive
Team

TRAINING TOPICS		
Access/Egress	Excavation	Machine Guarding
Incident	Exercise	Materials Handling
Prevention & Investigation	Explosives & Explosions	Mold/Water Damage/Abatement SDS
Near Misses	Eye & Face Protection	Office Hazards
Aerial Platforms	Falling Objects	OSHA 10/30, Beyond OSHA 10
Air Sampling	Fall Protection	Paint Safety Industrial Hygiene
ARC Flash	Fire Extinguishers	Personal Protective Equipment (PPE)
Asbestos	Fire Prevention/Watch	Preventative Maintenance, Safety
Audits	Firefighting	Reducing the Risk of Heart Attack
Back injury	First Aid/CPR	Respirator Fit Testing
Prevention & Investigation	Flagger - Traffic Control (not DOT)	Respiratory Hazards
Bloodborne Pathogens	Flammable & Combustible Liquids	Respiratory Protection
Burns	Fleet Safety	Rigging & Signaling
Carbon Monoxide Exposure	Forklifts	Safety Awareness
Carcinogens	Grading	Safety Orientation (new hires or others)
Chemical Health Hazards	Grounding	Safety Trained Supervisor (STS)
Chemicals & Solvents	Hazard Communication	Scaffolds
Competent Person	Hazardous Materials	Scissor Lifts/Boom Lifts
Compressed	Hazardous Work Ops	Silica, Preventing Silicosis
Gas	Hand/Head Hearing Protection	Slips, Trips & Falls
Cylinders	Hand & Power Tools, Toolbox	Spill Clean-up
Concrete	Heat Stress	Steel Erection
Confined Space	Heavy Equipment/Machinery	SWPPP
Construction Health & Safety Technician (CHST)	Hole Watch	Stress Management
Cranes & Slings	Housekeeping JLG training	Subcontractors
Crisis Management	Job Hazard Analysis	Toxic Substances
Cumulative Trauma Disorders	Ladders	Trenching
Drug-Free Workplace	Laser Safety	Weather Preparedness
Electrical Safety	Lead Awareness	Welding, Cutting & Brazing
Elevated Platform/Manlifts	Life Safety	Workers' Compensation
Emergency Preparedness	Lifting Safety	Workplace hazards
Ergonomics	Lockout/Tagout	

TOOLBOX SAFETY MEETING PROCEDURES

Procedures
Each week there will be at least one scheduled toolbox safety meeting. Discussion should include hazard analysis and hazard communication information with instruction on hazard avoidance, emergency and/or exposure procedures. Special toolbox meetings should be scheduled whenever jobsite conditions change, or new hazards develop. Toolbox meetings should be used as a forum for workers to give feedback on safety matters that concern them. Supervisors should allow enough time for workers to express any concerns they have or suggest improvements in our safety efforts. Prompt action must be taken to abate any hazards that are reported.

For years contractors like us have had toolbox safety meetings. Unfortunately, many of those who conduct these meetings simply "read" the meetings from a sheet of paper. The intended meeting message is usually lost. We must remember that toolbox safety meetings are our main means of communicating safety concerns in "the field."

The following is a "what to do list" when your scheduled to give the next toolbox safety meeting.

- Be Prepared
- Have Simple Notes
- Practice
- Make It Interesting
- Be Honest
- Be Clear and Brief
- Tell Yourself You're Going To Do A Great Job
- Do What Comes Natural
- Use Short Sentences
- Encourage Participation
- Be Enthusiastic
- Speak Up So Everyone Can Hear
- Eye Contact
- Listen to Ideas
- Praise Ideas
- Ask Questions
- Share Experiences
- Begin on Time and End on Time
- Have a Sense of Humor
- Never Read (Your Whole Presentation)

Toolbox topics abound on any jobsite. Here are a few ideas to get you started.

- Did you have any injuries the previous week that need discussion? If so, talk about causes, what led up to the incident, what action has been taken to prevent it etc. Do not dwell on the actual physical injury itself.
- Did you have any "near misses?" Talk should lean toward how to prevent the near miss in the future. This is a great tool for group discussion.
- Discuss weekly safety audit results. Where are the problems occurring? Are there any negative safety trends happening week after week?
- Hazardous Materials. New SDS sheets?
- PPE – Are requirements being fulfilled?
- Hazard Recognition
- PSM – Are there any new changes in the "process" that employees should be aware of?
- Training issues?

Documentation of your toolbox safety meeting is imperative.

- Fill in the SOLV Energy, LLC
- Weekly Safety Meeting Report form completely.
- Name of Job and Job Number.
- Date meeting was held.
- Number of employees assigned to the job and number present at your meeting.
- Did you have any incidents during the past week since last meeting?
- Fill in topics discussed
- Any recommendations?
- Superintendent/foremen comments
- Get everybody to sign-in on report form. If the group is large, attach additional sheets.
- Leader of toolbox meeting must sign-in at bottom of the sheet.

After the meeting, the report should be kept with the jobsite safety files.

NOISE CONTROL/HEARING CONSERVATION CHECKLIST

Yes/No Does your company have a noise control/hearing conservation program:

- ❑ Have noise levels been tested for your facility?
- ❑ Have noise levels been tested for your work areas?
- ❑ Have noise levels been tested for individual workers over an average workday?
- ❑ Have all workers received a baseline audiometric test?
- ❑ Are workers re-tested annually (twice yearly if exposed to more than 100 decibels)?
- ❑ Are workers with hearing loss assigned to less noisy areas or jobs?

Yes/No Does your hearing conservation training program cover:

- ❑ Possible effects of noise exposure on hearing?
- ❑ Symptoms of hearing loss (difficulty hearing voices, soft or high sounds, noise or ringing in ears?
- ❑ Protections offered by OSHA regulations?
- ❑ How to select hearing protectors?
- ❑ Using only approved hearing protectors, not handmade devices?
- ❑ Hearing protector hygiene (wash daily; replace disposable earplugs daily, wash hands before inserting ear plugs)?
- ❑ Home and recreational activities with dangerously high noise levels (power tools, motorcycles, snowmobiles, loud music, etc.)?

Yes/No Has your company or department taken such action to reduce noise levels at:

- ❑ Rubber mounts to reduce heavy equipment vibration?
- ❑ Acoustical tiles and blankets to absorb sound?
- ❑ Noise-reduction criteria built into equipment purchasing specs?
- ❑ Separate areas for noisy machinery?

- ❑ Equipment maintenance program to replace worn or loose parts, or eliminate rattles and squeaks?
- ❑ Replace metal with wood or plastic materials where possible?
- ❑ Schedule noisy operations/maintenance when fewest workers present?
- ❑ Is there a selection of protectors available if noise levels are 85 decibels or more?
- ❑ Earmuffs?
- ❑ Canal caps?
- ❑ Ear plugs?
- ❑ Is more than one type of hearing protectors assigned as needed?

FALL PROTECTION TRAINING

According to legend, Sir Isaac Newton discovered gravity when he was hit on the head with an apple while sitting under a tree. Unfortunately, on construction jobs very few people get hit on the head with just apples. But a great many are struck by bits of mortar, pieces of wood, metal scraps, tools, and other objects.

Look around the workplace and you'll see that many precautions have been taken to protect you from falling objects. The hard hat you are required to wear is, of course, your first line of protection. But a hard hat cannot protect your shoulders, arms, and feet from small falling objects, and if you happen to be in the way of a large falling object, chances are that you will be seriously injured or even killed.

For the most part, the people below depend on those working above for their safety. However, there are a few rules to follow that help make everyone's job safer.

If you are working above the ground:

- Be careful so that material will not fall from your worksite.
- Use trash containers or other means to keep debris from falling on persons below.
- Use the safety equipment and practices that are required for the job. Safety belts and lanyards on tools can prevent serious injuries.
- Don't engage in horseplay.
- Never deliberately throw or sweep material from above.
- Don't work, or allow others to work, under obviously unsafe conditions.
- If you are working on the ground or below other employees:
- Wear the required safety equipment at all times, especially your hard hat.
- Observe restricted areas where heavy work is being performed above.
- Pay attention to what is going on around you, particularly when cranes and other equipment are being used to hoist materials in the air.

Following safety rules and using safety equipment will not only eliminate many incidents but will also have a tendency to make those incidents that do occur, despite all precautions, less severe. If you make safety part of your daily routine, you will protect not only yourself but also those around you.

Nearby Workers

First let's talk about the safety precautions for workers in the operating areas of cranes or hoists, but who are not directly involved with their operation or use. These workers must:

- Stay alert and pay attention to the warning signal from overhead hoisting equipment.
- Never stand or walk under a load, whether it's moving or stationary.
- Always warn others of moving and approaching overhead loads.
- Never attempt to distract or signal persons or operators of the overhead equipment while they are performing their jobs.

The Operating Team
Now let's discuss the safety rules for operators, signal persons, and hookup crews. They must:

- Check to see that the equipment has been recently inspected. (This may not be necessary if the operator has been assigned to the same piece of equipment for a period of time.)
- Test the warning signal or device to make sure it is working properly.
- Never operate a crane that is unsafe.
- Check the brakes and all controls before starting work.
- Never permit an unauthorized person to operate the crane or give the signals.
- Always be sure that the operator and signal persons are in direct and clear view, or in communication by phone.
- Never carry a load over other workers.
- Always use warning signals before and during moves.
- Lower any load that appears to be slung improperly, so that it can be adjusted.
- Always lock the main control in the off position when oiling, adjusting, or repairing the equipment, or have someone guard the control.

The work of riggers and hookup crews is extremely important, because much of the safe operation of overhead cranes and hoists depends upon their knowledge and skill.

All members of the crew must know their job responsibilities and the proper procedures. Correct placement of the sling or choker, or of the chain, contributes to safe lift travel and positioning of the load. The placement controls the balance and how the system will handle on the hook throughout the operation.

Sometimes the crew must determine whether a tag line is needed to control the motion and position of the load while it's in the air. Knowing how to place and manipulate the tag line safely requires skill and alertness.

Overall Safety
Safe operation of crane and hoisting equipment requires efficient teamwork and a thorough knowledge of the skills involved.

Safety on the worksite as a whole also requires alertness and caution of other workers while a crane or hoist is in operation.

Training Purpose
To explain the OSHA regulation designed to prevent construction falls and the protective devices and practices it requires. The result should be greater understanding of fall hazards in construction and other tasks performed above ground, as well as more caution when performing such jobs and better use of personal fall arrest systems.

Suggested Materials to Have on Hand:

- Safety nets
- Personal fall arrest systems
- Hard hats

Introduction

Clearly, anyone who works high above the ground runs the risk of falling and incurring serious injury. However, a surprising number of workers are of the mindset that it will not happen to them. This is a particular problem in construction, where at least one worker dies each day from a fall, and many more are injured.

Construction is not a sedentary, fixed site industry. People do not remain at the same worksite for various years, or even work through the end of a construction project. The workers at a specific site may change from day to day, and each site may have workers and equipment from more than one company. In addition, construction work often takes place outdoors, where weather can add to the hazards.

Because of these factors, OSHA has separate standards that apply to construction work, including a 1994 fall protection standard. The agency believes that its procedures can prevent many falls and keep many more from ending in injury or death.

Though the standard applies only to construction, many of its guidelines are useful for anyone who may sometimes work on an elevated surface. OSHA rules will be discussed and issues will be addressed about the practices and equipment that can prevent falls.

OSHA Regulations

OSHA gathered input from many employers and employee groups to develop its fall protection standard (29 CFR 1926.500-503) for the construction industry. The standard identifies work situations with a risk of falling such as work on scaffolds, certain cranes and derricks, steel erection, tunneling, electric transmission line, equipment construction, stairways, and ladders.

The new standard covers all other construction activities six feet or more above the ground or a lower level. We will discuss the specific situations OSHA identified in a moment. The regulation also covers practices designed to protect workers from being hit by falling objects.

Like other new OSHA standards, this one is performance-oriented. That means employers play a role both in identifying risks and the best ways to protect workers from them. All employers must, of course, do everything possible to prevent these incidents.

OSHA says employers must “determine if the walking/working surfaces on which the employees are to work have the strength and structural integrity to support employees safely." Not surprisingly, it permits employees only on surfaces that have those qualities.

In addition, employers have to provide and install the fall protection systems the standard requires.

Employers also have to train any employee who might be exposed to fall hazards. The training helps employees learn to understand and recognize an area's fall hazards, as well as how to maintain, inspect, and use the fall protection systems. Training must also cover how to handle and store the fall protection equipment and any limits on its effectiveness.

Employers must certify in writing that workers have completed this training. They will retrain employees if workplace hazards or fall protection systems change or an employee doesn't seem to understand the hazards and protections.

Identifying Hazards
The OSHA standard identifies situations with fall hazards as those where employees work six feet or more above the ground or a lower level on:

- Walking and working surfaces, including ramps and runways
- Unprotected leading edges of floors, roofs, floor formworks, and other surfaces not actively and continuously under construction
- Faces of formwork or reinforcing steel
- Hoist areas
- Areas above holes, including skylights
- Edges of excavations
- Roofs of various pitches
- Precast concrete structural members that are being put up
- Areas where overhand bricklaying and related work are performed
- Residential construction
- Wall openings
- Areas above equipment, such as machinery, electrical equipment, degreasing units, or anything that could create a hazard if you fall on or in it.

Protection Against Hazards
To be safe, you must know more than which situations present fall hazards. You also must know what protection to use to prevent falls. In most cases, the standard expects employers to provide one or more of these basic protections: guardrail, safety net, and/or personal fall arrest systems.

In certain circumstances, employers may also use:

- Warning line systems
- Controlled access zones
- Safety monitoring systems
- Covers
- Fall protection plan

We'll discuss all of these in detail in a minute.

Protection from Falling Objects

As I mentioned earlier, the standard covers not just falls but protection from falling objects. The rules cover both systems and policies that prevent objects from falling and protections to keep employees in the path of falling objects from harm.

The key employee protection is a simple requirement:

If you're working in an area in which objects might fall, you must wear a hard hat.

As added protection, employers may use barricades and bans on entry to keep employees out of an area into which objects might fall. You can only use barricades in combination with policies and procedures designed to keep objects above from incidentally falling over the edge. Instead of or in addition to that combination, employers may prevent injuries from falling objects in one of two ways.

One option is to use toe boards, screens, or guardrail system on the upper level working area. The toe boards, at least 3½ inches high, must be able to withstand a 50-pound force. If you keep materials higher than the toe board on the upper level, you must place a screen or panel from the top of the toe board to the guardrail.

The other choice is to install a canopy on the aboveground work area. The canopy must be collapse-proof and strong enough that falling objects can't penetrate it. In addition, you must keep materials on that work level where they won't incidentally go over the edge.

In addition to all this, OSHA says any materials piled or stacked near a roof edge must be stable and self-supporting. You can't store masonry and mortar equipment closer than four feet to the working edge and must remove any related scrap regularly. You also can't keep roofing materials closer than six feet to the edge unless there are guardrails.

That's how OSHA expects us to prevent injuries from falling objects. Now let's look at how the safety regulation works to keep us from falling.

As I mentioned, fall protection usually involves guardrail, safety net, and/or personal fall arrest systems. OSHA requires one or more of these systems except in certain limited situations that I'll describe shortly. First, let's look at the three basic protections.

Guardrails are a barrier between you and an open upper-level edge. OSHA is very specific about guardrails' design and construction. They're generally about 42 inches high. If there's no wall 21 inches or higher, you must have mid-rails, screens, or something similar between the guardrail's top and bottom to prevent a fall.

Guardrails must be made of materials strong enough to stand up against a force of at least 200 pounds. They can't be made of materials that could puncture the skin or snag your clothes. You can't use steel or plastic bands for top or middle rails.

Safety net systems are designed to catch you if you do fall. They are made with strong border ropes and mesh openings no more than 36 square inches or 6 inches on any side and placed 30 feet or less under the walking or working surface.

Of course, nets have to be strong enough to save a falling person. If they're not certified, employers test them by dropping a 400-pound bag of sand about 30 inches in diameter from the highest walking/working surface.

As added protection, OSHA requires us to inspect the nets at least weekly for wear, damage, and deterioration. Obviously, if they're no good, they're replaced. The agency also says to remove any material or scrap that falls into a net as quickly as possible.

Personal fall arrest systems are a very valuable form of protection when you work aboveground. You wear a body belt or harness connected to a fixed anchor by a lanyard, lifeline, or deceleration device that can hold your weight, so you don't crash to the ground. They're similar to what bungee jumpers use, but very carefully designed to limit the amount of free fall and to protect you from injury.

Harness straps attach in the center of your back near your shoulders or over your head; they distribute the fall arrest forces around the mid-body. A body belt goes around the waist but is prohibited for use after January 1, 1998.

If you start to fall, a personal fall arrest system goes into action by the time you've fallen six feet and before contact with any lower level. Once it comes into play, it must bring the falling person to a complete stop after falling no more than 3½ feet.

The only purpose of a personal fall arrest system is to keep you from falling. Don't use one to hoist materials. You must also inspect the equipment before each use to make sure there's no damage or deterioration. If you spot any problems, you turn the system in and get a new one.

Any equipment is only as good as its parts. With personal fall arrest systems, the connectors that link the parts together are especially vital. The regulation details what materials meet its standards and how much they have to be able to hold without breaking.

One common type of connector is a snap hook. The best ones are self-locking and self-closing, so they won't open under moderate pressure unless someone releases them. Non-locking snap hooks can't be used after January 1, 1998.

A good system also has an anchor that won't budge or break. An anchor must be able to support at least 5,000 pounds per employee attached to it. You can't anchor people to a guardrail, hoist, or anything used to support or suspend a platform.

If you do fall when wearing one of these apparatuses, you also must be able to rescue yourself or be rescued by others immediately.

People who work on walls or other elevated vertical surfaces get special fall arrest systems known as positioning devices. They allow you to lean and have both hands free to perform your job. These devices must support at least twice the potential load of an employee's fall and assure that you can't fall more than two feet before they kick in. They need especially tough connectors.

Those are the three-fall protection systems OSHA prefers. But, as I mentioned earlier, the agency permits other forms of protection in certain situations.

Warning line systems are rope, wire, or chain barriers that alert employees to an unprotected roof side or edge. Alone, they're not enough protection. We must use them with guardrail, safety net, and/or personal fall arrest systems or with a safety monitoring system that I'll explain in a minute.

Warning lines are at least six feet from the roof edge and go around all sides of the roof work area. Needless to say, no one can work between the roof edge and warning line unless they're roofing in that area.

Controlled access zones are areas where certain work like overhand bricklaying can be performed without guardrail, safety net, or personal fall arrest systems. As the name indicates, these areas are off limits to all but specially authorized people.

Lines of rope, wire, tape, etc. set off these zones. The lines are at least six feet from the unprotected edge - 10 feet for overhand bricklaying. They run the full length of that edge and connect to a guardrail system or wall on each end.

Safety monitoring systems are another alternative form of fall protection OSHA permits in certain situations. With safety monitoring, you place a trained person with the workers on the elevated walking/working surface. This person's job is to look for fall hazards and warn employees when they're approaching danger. The monitor must be in a spot where his or her spoken warning can be heard. And when you hear that warning you'd better follow orders!

We can use safety monitoring along with a warning line system on low-slope roofs or alone on roofs less than 50 feet wide. Employers may also use it in situations where they demonstrate that they can't use guardrails, safety nets, and personal fall arrest systems or that those systems would create a greater hazard than they prevent.

Covers can keep people from falling through holes in floors, roofs, etc. The covers are color-coded or marked HOLE or COVER so you know there's a hazard. They must be secured so they won't move incidentally and able to support at least twice the weight of employees, equipment, and materials that could be on them at once.

Fall Protection Plans
I indicated that OSHA recognizes that occasionally fall protection systems can't be used or may create a greater hazard. When employers can prove that's the case on work that involves leading edges, precast concrete erection, or residential construction, there's an option.

In those situations, OSHA allows employers to develop a fall protection plan for that site. The employer must assign a person with knowledge of fall hazards to create the plan, keep it up to date, and supervise its execution. A copy must be kept at the job site.

The plan explains why guardrail, safety net, or personal fall arrest systems can't be used. Then it states what the employer will do to reduce or eliminate the fall hazard.

The plan must also state clearly that the site it covers is a controlled access zone and organize the site accordingly. The plan lists each employee permitted to work in the zone. No one else is admitted. Employers must also use safety monitoring if no other fall protection system is in place at the site.

As added protection, OSHA requires employers to investigate any falls that do occur at these sites even near misses. After the investigation, the employer must make any changes needed to prevent similar incidents.

SAFETY PROCEDURES
It's not easy to remember all these fall hazards and protection systems. Fortunately, you don't have to decide what to use and when. OSHA makes that an employer responsibility. It's your responsibility to take these hazards seriously and to use any protections provided properly.
Otherwise, you put yourself or others at risk.

One important employee responsibility is to inspect the personal fall arrest system before you use it. Turn in anything that has:

- Cuts, tears, or abrasions
- Undue stretching
- Mold
- Deterioration
- Distorted hooks or faulty hook springs
- Nonfunctioning parts
- Loose or damaged mountings
- Tongues that don't fit the shoulder of buckles
- Contact with fire, acid, or other corrosives
- Alterations or additions that limit its effectiveness

For a personal fall arrest system to protect you, you need a proper and secure anchorage. Sometimes anchorages are designed into a structure. Then window washers

and others can use them later.

Other options include a steel member or I-beam; steel eyebolts, guardrails or railings designed for anchor use; and certain masonry or wood pieces. Someone with technical knowledge will determine if possible, anchors are strong and secure enough for the task.

You want to be just as sure that the anchor connections are strong. If you use a knot to tie-off it can reduce the strength of the lifeline or lanyard by 50 percent or more no matter how strong the anchor it's tied to. To offset that loss, we use a stronger lanyard or lifeline to compensate.

Try not to tie-off over a rough or sharp edge, which can also weaken the line. If you tie off to an "H" or "I" beam, you must use lanyards made of webbing or lifelines with wire cores because they're stronger and less likely to be damaged by the edge.

Some types of knots also limit the system's strength and fall protection ability. Never use a one- and-one sliding hitch knot and try to avoid using any hitch knot.

Other Fall Prevention Techniques

We've talked about how OSHA-required systems and equipment can prevent construction falls and deaths and injuries. But as you know, equipment and procedures are never quite enough. You need a cautious, safety-oriented attitude and must take precautions to reduce the chance that you'll fall.

Here are some safety procedures that will help you prevent falls on any level - but especially from heights:

- Wear sturdy shoes with nonskid soles. Be sure the shoes have either short laces or buckles or snaps.
- Avoid wearing long, loose pants you could trip over.
- Walk slowly and watch where you're going and don't run.
- Clean up all spills promptly.
- Take special care on wet or icy surfaces.
- Don't carry a stack of materials you can't see over.
- Carry only the tools and materials you need to upper levels.
- Keep all materials as far away from the edge as possible.
- Dispose of trash regularly and properly.
- Stay away from edges, even if they're guarded, unless you're performing a specific task there.
- Obey verbal warnings, signs, and barriers. Don't enter a controlled access zone without authorization.

Suggested Discussion Questions

- What types of construction sites create a risk of falls?
- How far up does a work surface have to be to require construction fall protection?
- What are the three-standard means of fall protection?
- What is a personal fall arrest system?
- What is a controlled access zone?
- What is a safety monitoring system?
- What protections prevent getting hit by falling objects?
- What do you check for when you inspect a personal fall arrest system?
- What are some general precautions to help prevent falls?
- Are there any other questions?

Wrap-Up

No one wants to end up like Humpty Dumpty and take a big and fatal fall. OSHA's construction fall protection standard was created to make that a lot less likely. By requiring protection when you're at least six feet up, OSHA believes it can really cut the number of falls and related deaths and injuries. The systems, plus the required training programs, are an effort to get all involved parties on the same safety wavelength.

The OSHA standard we've been discussing today has a lot of details. It is very specific about when fall protection is required and what equipment is tough enough to do the job.

The standard's careful efforts to prevent falls emphasizes how serious these incidents are. It demonstrates that we can and should prevent falls whenever any construction involves work aboveground.

Preventing Construction Falls

- Construction work six or more feet high requires:
- Walking/working surfaces approved to hold workers safely
- Employees trained to recognize fall hazards and use protective
- Systems
- Fall protection systems for workers
- Procedures to prevent objects from falling.

OSHA's three standard fall protection systems:

- Guardrails:
- At least 42 inches high
- Mid-rails and screens where there's no wall at least 21 inches high
- Able to withstand force of at least 200 pounds
- Construction materials that can't puncture skin or snag clothes
- No steel or plastic bands for top or middle rails.

Safety nets:

- Removed from use if not in top condition.

Personal fall arrest system:

- Body harness or belt connected to fixed anchor by lanyard, lifeline, or deceleration device (no belts after January 1,1998).
- Prevent contact with lower level and more than six feet of free fall.
- Positioning device style used on elevated vertical surface work.
- Not used to hoist materials.
- Inspected before use. Not used if inspection reveals cuts, tears, abrasions, 30 feet or less below elevated walking/working surface
- Strong rope border, with mesh openings smaller than 36 inches square or 6 inches per side
- Strength certified or tested by dropping a 400 pound, 30-inch diameter bag of sand
- Inspected weekly for wear, damage, and deterioration:
    - Undue stretching
    - Mold
    - Distorted hooks, faulty hook springs
    - Nonfunctioning parts
    - Loose or damaged mountings
    - Tongues that don't fit shoulder of buckles
    - Contact with fire, acid, or other corrosives
    - Alterations or additions that limit effectiveness.
- Self-locking, self-closing connectors preferred (required after January 1,1998)
- Anchor can support at least 5,000 pounds per attached employee
- Can't connect to platform supports or suspension points, guard rails, or hoists
- Avoid connecting to rough or sharp edge; tie off to "H" or "I" beam only with webbing lanyard or lifeline with wire core
- Can't connect with one-and-one sliding hitch knot; avoid any hitch knot
- Use only when rescue system is in place.

Acceptable fall protection for special defined situations:

Warning line system:

- Lines placed at least six feet from and all-around roof edge
- Used only with guardrail, safety net, and/or personal fall arrest systems or safety monitoring systems.

Controlled access zone:

- Area with unprotected edge set off by rope, wire, or tape lines
- Entry by authorized personnel only
- Lines run length of unprotected edge, at least 6 feet in (10 feet for overhand bricklaying) and connected

Safety monitoring system:

- Used when the three standard protections are not feasible or would create greater hazard and/or with warning line system
- Places monitor on elevated surface with workers, close enough to be heard
- Monitor identifies hazards and warns workers.

Hole covers:

- Identified by name or color
- Secure enough not to move incidentally
- Strong enough for twice the weight they might have to hold

Fall protection plan:

- Site-specific, written by competent employer-authorized person

Last-resort option for leading edges, precast concrete erection, or residential construction

- Explains why the three standard protections are not feasible or could create greater hazard
- Explains procedures/equipment to reduce or eliminate fall hazard
- Creates controlled access zones; names employees who can enter
- Explains when and how safety-monitoring system will be used

General fall prevention precautions:
Wear sturdy shoes with nonskid soles and buckles, snaps, or short laces.

- Avoid long, loose pants.
- Walk slowly, don't run.
- Watch where you're going
- Clean up all spills promptly.
- Take special care on wet or icy surfaces.
- Carry no more materials than you can see over.
- Keep only needed materials on aboveground work areas.
- Keep materials as far away from the edge as possible.
- Dispose of trash regularly and properly.
- Stay away from edges.
- Obey all verbal warnings, signs, and barriers.

Protection from falling objects:

- Wear hard hat when objects might fall from above.
- Install guard rails, screens, or toe boards at least 3½ inches high, plus screen or panel if nearby materials are taller than toe board, OR
- Install canopy that will not collapse or be penetrated by falling objects, and place objects where they can't incidentally go over edge, OR
- Install barricades in area where objects could fall, keep employees out of barricaded area, and place overhead objects where they can't incidentally go over edge.

- Place only stable and self-supporting objects near roof edge.
- Store mortar and masonry equipment at least four feet from edge.
- Remove mortar scrap regularly.
- Keep roofing materials at least six feet from edge if there are no guardrails.

TRAINING ATTENDANCE ROSTER

Training Topic(s): _____
Training Method(s): _____
Trainer(s): _____
Date of Training: _____
Location: _____

I have understood the materials presented and have had my questions answered satisfactorily. In the event of any other questions, I know the individuals to contact.

ESPANOL*: He entendido todo el material presentado y me han contestado todas las preguntas que tenia. Si tenga alguna pregunta más en el futuro, sé con quién comunicarme.*

Employee Name	Title/Position	Company	Employee Signature

End of Section L: Training Programs
(Additional)

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SECTION M:

SAFETY INSPECTIONS, AUDITS RECORD KEEPING & POSTINGS

SOLV Energy
16680 West Bernardo Drive
San Diego, Ca. 92127

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SAFETY INSPECTIONS & AUDITS

The Safety Manager, along with the Project Manager and Superintendent, are responsible for the implementation of our Injury & Illness Prevention Program (IIPP).

Any recommendations made by the Safety Manager must be put into effect immediately if the recommendations concern an imminent hazard to any personnel. Otherwise, the recommendations must be put into effect as soon as practical depending upon the scope of the necessary corrections.

The Superintendent or other Competent Person specifically assigned to do the task shall make periodic inspections of the project, looking for safety concerns. This Competent Person, preferably a Carpenter Foreperson or Lead Man, shall be called the "Designated Safety Person" (DSP) and will have authority to correct imminent danger hazards immediately. This may involve Subcontractor operations in addition to SOLV Energy, and its affiliates' work. The DSP should affect correction of safety concerns by working with Foremen or Supervisors with authority over workers found performing an unsafe act or creating an unsafe condition.
Subcontractors, just like SOLV Energy and its affiliates, are required to maintain an effective Illness and Injury Prevention Program. As experts within their scope of work, we feel they are best able to control hazards related to their operations. We expect them to do so. The Superintendent or DSP should notify Subcontractors of any observed safety concerns related to their work.

In addition to inspections performed by the Superintendent or DSP, Assistant Superintendents, Foremen, or Lead Workers must always be alert to correct any potentially unsafe acts or conditions they observe.

Our insurance carrier representatives and State or Federal OSHA compliance or consultation engineers may also make safety inspections. Full cooperation must be given to both representatives with violations, if any, being corrected as soon as they are made known.

SAFETY, ENVIRONMENTAL AND HEALTH AUDIT FORM

Job Name: _____ Date: _____
Job No.: _____ Superintendent: _____
Audit/Safety Manager: _____ Division of Project: _____
Select One: _____ Select One: _____
Project Manager: _____ State/Location of Project: _____

❑	Asbestos/Lead/Silica/Other	❑	IIPP Manual
❑	Bulletin Board with Required Postings	❑	SDS Manual/Site-Specific Plan
❑	Code of Safe Work Practices	❑	Ladders/Stairways/Proper Access Laser Signs
❑	Issued/Posted Emergency Contact	❑	Leading Edge Protection Lighting
❑	List Issued/Posted Confined Spaces	❑	Machinery Guarded Water Damage/Mold
❑	Cranes (inspections/certifications)	❑	Perimeter Guarding
❑	Crisis Management Plan/Emergency	❑	Power Tools/Powder Act. Tools
❑	phone # Cylinder Label/Storage	❑	PPE (Hard Hats, Safety Glasses, Vests,
❑	Electric Cords, GFCI Protection Elevated		Gloves, etc.)
❑	Equipment	❑	Pressurized Equipment Guards
❑	Emergency Evacuation Plan Posted	❑	Pre-Task Planning Documented
❑	Excavations/Competent Person	❑	Proper Shoring
❑	Fall Protection	❑	Safety Meetings/Training Documented
❑	Fire Extinguishers First Aid Kit/Stretcher		Scaffolds
❑	Flammable Liquid Storage	❑	Stormwater Plan Toe boards/Guardrails
❑	Floor/Roof/Elevator Openings	❑	Toilets/Sanitation (1/10; 1 separate if 1+
❑	Forklift Safety/Operator		females up to 9, then 1/10 females)
❑	Certification Hand wash station(s)	❑	Traffic Control Vertical Rebar
❑	Hearing Protection/Conservation		
❑	Hot/Cold Stress/Potable H2O		
❑	Housekeeping		

All items checked above have been reviewed.

Distribution:

- ❑ Project Manager
- ❑ Division Manager
- ❑ Operations Manager
- ❑ SE&H Department

❑ **CORRECTION/ABATEMENT PAGE ATTACHED** - All corrections on the attached page are to be completed and documented by the requested abatement date. Keep a copy in the job files and forward a copy to the Corporate Safety Manager for your Division. Thank you for your timely attention to these issues.

JOB SAFETY INSPECTION GUIDE

JOB:

DATE:

SAFETY ITEM
CORRECTION REQUIRED
DATE CORRECTED

JOB SAFETY INSPECTION GUIDE

JOB **DATE**

SAFETY ITEM	OK	CORRECTION REQUIRED - ITEM # Location/Description/Subcontractor	DATE CORRECTED
1. PERIMETER GUARDING - TWO RAILS			
2. SCAFFOLDS:			
a) All types, must be fully planked			
b) Equipped with Standard Guardrails & Toe Boards			
1) Rolling			
a) Wheels Locked			
b) Relatively level			
c) Outriggers on both sides if base less than 1/3 height			
2) Waler/Bracket: Guardrails - including End Rails			
3) Metal Scaffolds - Secured with #12 wire or outriggers if height exceeds 4 x base			
3. FLOOR OPENINGS AND ROOF OPENINGS			
4. ELEVATOR AND SHAFT OPENINGS			
5. EXCAVATIONS (over 4'11")			
a) Permit posted (in Field Office)			
b) Shored or sloped (3/4 to 1")			
c) Ladder for ingress & egress			
6. LADDERS:			
a) Step: no work on top 3 steps			
b) Straight: Secured over 36" above landing			
7. STAIRWAYS			
a. Minimum of two - with guardrails			
b. Fillers in open tread			
8. PERSONAL PROTECTIVE EQUIPMENT			
a. Hard Hats			
b. Safety glasses or goggles			
c. Ear protection			
d. Safety belts			
e. Respirators/Dust Masks			
9. HOUSEKEEPING			
a. Walkways and Work Areas			
b. Around Ladders and Stairways			
10. LIGHTING			
Walkways, Workplaces, Stairways and Doors			
11. VERTICAL REBAR - PROTECTION			
12. POWER TOOLS – GROUNDED			

13. POWDER ACTUATED TOOLS a. Journeyman with Certification Card b. No frayed cords **14. FIRE PREVENTION** a. Minimum two 20 lb. ABC's/floor b. One in manlift c. Welding Operations (CO^2) d. Flammable storage areas e. Welding shields **15. ACETYLENE/OXYGEN BOTTLES** a. Separated (20 feet apart) b. Secured (Empty or Full) **16. TRAFFIC CONTROL** Red Vest and Stop Signs, Cones if necessary **17. UNSAFE PRACTICES** Company, Location and Description **18. FIRST AID KIT & STRETCHER** **19. EMERGENCY MEDICAL PLAN & EVACUATION PROGRAM** **20. TOILETS** - One per 20 employees **21. CRANES** (Must be certified annually) a. Cannot operate within 10' of high voltage lines b. Fire extinguisher in cab c. Boom angle, load indicator working d. Maintenance Program **22.** SAFETY MEETINGS Weekly and recorded **23.** HAZARDOUS SUBSTANCS Type, Area and User			

RECORD KEEPING REQUIREMENTS

The Federal Occupational Safety and Health Act became effective April 28, 1971. In addition to the rules, regulations and enforcement procedures pertaining to the mandatory safety and health standards, an important feature of the act is the mandatory record keeping and reporting of occupational injuries and illnesses. The record keeping requirement became effective July 1, 1971. Citations and monetary fines are assessable if records are not kept or posters are not displayed.

Following is a description of the required forms along with routing instructions.

A poster entitled SAFETY AND HEALTH PROTECTION ON THE JOB. This must be displayed in a prominent place and informs employees of responsibilities imposed and penalties proved by the act. Each job bulletin board contains a OSHA poster that will comply with this requirement.

If the poster becomes worn, secure a new one from your Division Office. Remember that one of the first things the OSHA inspectors will look for when they visit your projects will be this poster.

LOG AND SUMMARY OF OCCUPATIONAL INJURIES AND ILLNESSES. Each occupational injury and illness (as defined in the form) must be entered on the log within two working days of receiving information that the injury or illness has occurred, by the Job Accountant. Jobs without a Job Accountant on the actual job itself will have their Log and Summary maintained in the office.

Number the incidents in consecutive order, prefixed by your job number.

The form is basically self-explanatory in conjunction with instructions on reverse side.

COLUMN 5 will be either field or office.

COLUMN 7 will be Injury Code 10 in most cases but could be one of the illness codes if applicable.

COLUMN 10 will be checked only if termination notice is issued. If transferred to another job, record the job number in this column.

POSTING REQUIREMENTS

As an employer, SOLV Energy, LLC is required to maintain certain items on a bulletin board at our jobsites where employees may gather and have access to the information posted. The required forms will be provided in a packet along with the jobsite bulletin board(s) at the beginning of the job. Replacement of posters may become necessary during the life of the project due to damage or weather conditions. The Project Superintendent should periodically review the bulletin boards on the project to make sure all information is current. A list of the required posters is provided to help audit project bulletin boards, however the most up-to- date information is managed by Human Resources.

Contact the HR Department for the most recent job posting

requirements. Note: Items marked * also required at Division

Offices.

Required:

- Citations, Special Orders, Notices of Violations or Abatement (if issued)
- Code of Safe Work Practices
- Davis-Bacon Act Prevailing Wage Rates (federally-funded projects only)
- *Drug-Free Workplace Policy
- Emergency Phone Numbers (post near telephones)
- *Employee Polygraph Protection
- *Equal Employment Opportunity Notice
- *Family Leave Notice (federal)
- *Fire Prevention Program and Evacuation Plan
- *Harassment & Discrimination in Employment
- Hazard Communication List of Chemicals
- *Job Safety and Health Protection (Fed-OSHA)
- Laser Warning Placard (when applicable)

- Federal Minimum Wage
- *Occupational Injuries Summary (post between February 1 and March 1 only)
- *Pay Day Notice
- Permits at jobsite
- Registration for Asbestos Related Work (when applicable)
- Safe Operating Instruction for Forklifts, Etc. (post on or near equipment)
- *Smoking Policy and Ordinances (when applicable)
- *Unemployment Insurance and Disability Insurance
- Walsh-Healy Public Contract Notice (federally-funded projects only)
- *Workers Compensation Carrier Notice (local area)
- MBE/WBE Philosophy, *optional*
- Mission Statement, *optional*
- Off-Duty Recreational, Social & Athletic Activities, *optional*
- Partners Against Fraud, *optional*

End of Section M:
Safety Inspections, Audits
Record Keeping and Posting