ALISO CANYON SAFETY PLAN

12/13/2024

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1 PURPOSE AND SCOPE

The purpose of this document is to describe the Aliso Canyon Safety program, and to define interactions, roles, and responsibilities.

The Aliso Canyon Natural Gas Storage Facility is owned and operated by the Southern California Gas Company and is the largest of four such storage facilities in Southern California. The facility sits on 3600 acres of land located in a high fire hazard area to the north of the communities of Porter Ranch and Northridge. Major components of the facility include the gas storage reservoir, located thousands of feet below the surface in underground rock formations, gas compression and dehydration equipment, associated injection and withdrawal piping systems and wells, electric generation and distribution systems, and administrative offices.

SoCalGas has numerous existing safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. The intent of this Aliso Canyon Safety Plan is not to duplicate these existing safety program components, but to function within them as they apply to the Aliso Canyon facility.

The Aliso Canyon Safety program ensures that policies and procedures related to the safe conduct and actions are followed and meet the needs of the high fire dangers and unique conditions of Aliso Canyon. These policies and procedures are used as a foundation to establish safe operations at the Aliso Canyon Facility.

2 SAFETY POLICY

Sempra Energy considers it essential to protect the health and safety of our employees, our customers, and the diverse communities in which we operate and provide service. Therefore, Aliso Canyon adheres to the following principles:

- Aliso Canyon provides safe products and services to our customers. Safety is one of Aliso Canyon's corporate values and in all that we do, we are committed to deliver products and services safely.
- Aliso is committed to comply with applicable international, federal, state, and local health and safety laws and requirements.
- Injuries and property damage can be prevented; accidents are not an unavoidable consequence of doing business. Hazards can be minimized by promoting safe work practices and proper preventative measures. Identification and reporting of potential hazards are the responsibility of every employee.
- Management is responsible for providing a safe workplace, and for promoting and ensuring behaviors and providing safeguards that help prevent accidents and injuries. All management personnel have a leadership role concerning safety within their areas of responsibility and for complying with both the Aliso Canyon and Corporate safety programs.
- Safety is a condition of employment. Working safely and looking out for the safety of fellow employees is an important part of job performance evaluations.

3 ALISO CANYON ORGANIZATIONAL SUMMARY CHART

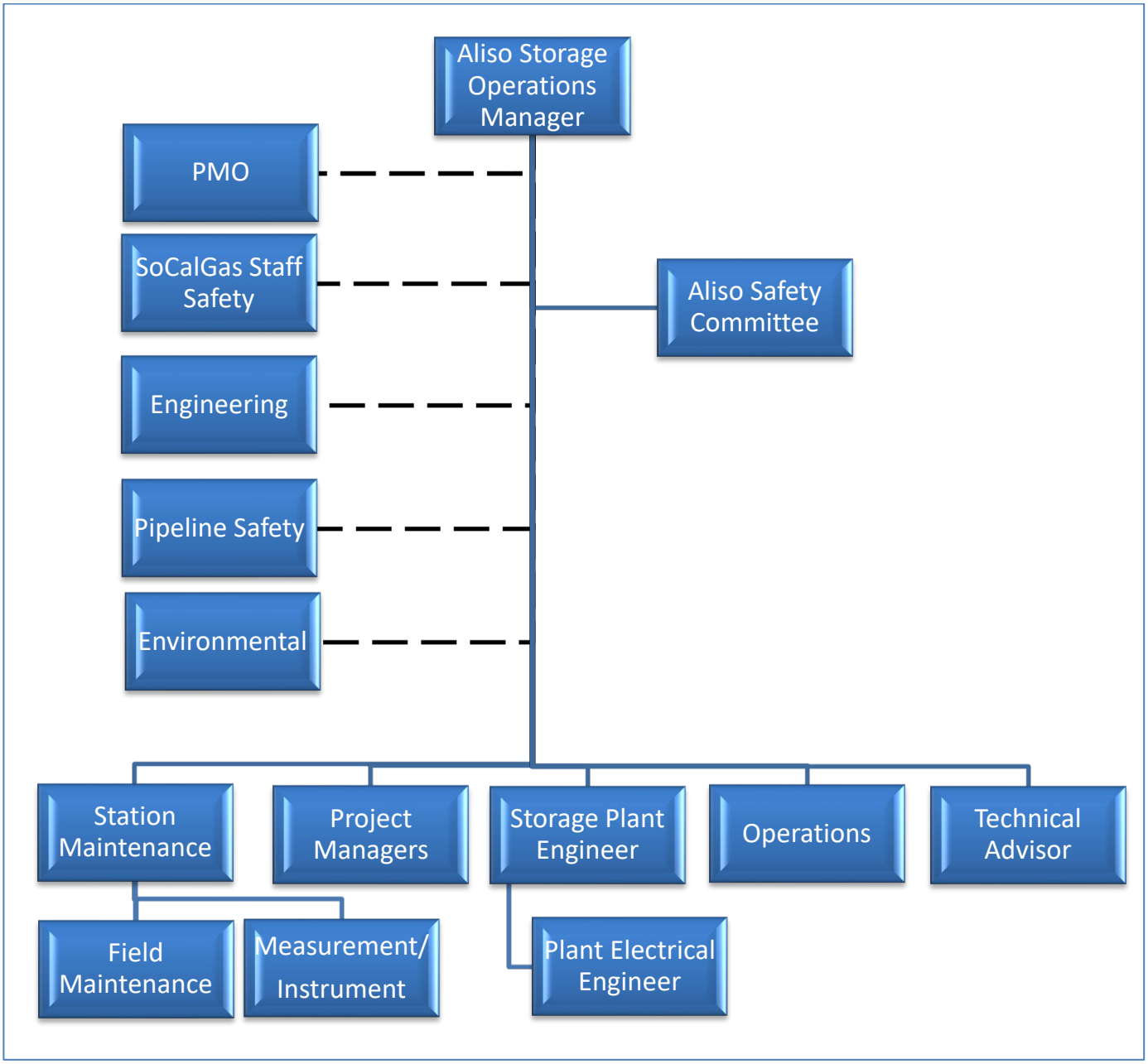


Figure 1 (Aliso Canyon Organizational Chart)

4 ALISO CANYON PRINCIPAL GOALS AND OBJECTIVES

4.1 WHAT IT MEANS

- We never compromise safety.
- Pertains to everyone; each one of us.
- Teamwork; Look out for one another.
- Includes all level from Directors and Managers to Supervisors and front-line employees.

4.2 NEVER COMPROMISE SAFETY

- We care primarily about employee and customer safety.
- We want employees to be able to go home to their families and loved ones after work each day and be able to return to work safely the next day.
- Never allow shortcuts to safety.
- Never compromise safety for production, customer satisfaction or other goals.
- No activity is so important that it should jeopardize employee or customer safety.

4.3 TAKE RESPONSIBILITY

- Raise one's level of safety consciousness.
- Learn how to work safely.
- Take responsibility for ensuring not only one's own health and safety, but also the safety of others.
- Be accountable and hold others accountable.
- Challenge at-risk behaviors and conditions and intervene to correct them, positively reinforce safe and healthy behaviors, and insist on safe working conditions.
- Integrate health and safety into all policies, procedures, and operating practices.

4.4 SAFE AND HEALTHY BEHAVIOR

- Focus upstream; eliminating at-risk behaviors will prevent near-misses and incidents.
- Includes management behavior in terms of leadership, instruction, resource planning, responsiveness, decision making, job observations, etc.
- Observable action; correctable, coachable, learnable, trainable, trackable, rewardable
- Safe and healthy behavior will become a core value and habit.
- Examples include using Smith Driving techniques, following office ergonomics procedures, recognizing safety efforts, and putting a lid on coffee cups, etc.

4.5 LEADING TO AN ACCIDENT-FREE LIFESTYLE

- Being Accident-free will be the consequence, or outcome, of practicing safe behavior; "at risk" behavior will be gone.
- Accidents (including near misses, minor injuries, etc.) are preventable; not limited to "recordable" or "reported" accidents.
- Safety has no quitting time.
- Safety is a value; we do it even when no one is looking.

4.6 EXPECTATIONS OF LEADERSHIP

4.6.1 Aliso Canyon Management Expectations

- Storage Operations Manager, Station Operations Managers and Station Supervisors are responsible for ensuring all safety policies and procedures are clearly communicated and understood by all employees.
- Storage Operations Manager, Station Operations Managers and Station Supervisors are responsible for updating the Aliso Canyon Safety Orientation as work conditions change.
- Storage Operations Manager, Station Operations Managers and Station Supervisors are responsible for investigating injuries, incidents, and near-misses to determine underlying/contributing factors and identify corrective actions.
- Storage Operations Manager (or designee) conducts semi-annual safety inspections of the Aliso Canyon facility and documents the results, including any corrective actions, in the Safety Information Management System (SIMS). The Storage Operations Manager is responsible for verifying that all corrective actions are completed within the timeframe specified in SIMS.
- Storage Operations Manager with support from the Field Safety Advisor is responsible for conducting an annual self-assessment of Aliso Canyon facilities and operations to assess compliance with applicable safety regulatory requirements and internal company policies. The results of the self-assessment, including any corrective actions, are documented in SIMS and the Storage Operations Manager is responsible for verifying that all corrective actions are completed.
- Storage Operations Manager completes the annual Environmental and Safety Compliance Management Program (ESCMP) checklist to assess compliance with safety and environmental laws and regulations and Company policies and procedures and submits the signed checklist to the Director of Storage for approval. The Storage Operations Manager provides quarterly updates on the status of open corrective actions to Safety and Environmental Services.
- Storage Operations Manager (or designee) is responsible to develop and maintain the Aliso Canyon Website dedicated to facility operations. The website will include the Aliso Canyon Safety Plan, brush clearing schedule, project updates, annual GO95 and GO165 reports, safety audit reports, notices of overhead electric distribution facility shut-downs, links to SoCalGas safety website and safety audits and inspections status.
- Aliso Canyon Plant Electrical Engineer is responsible to manage the implementation of the Aliso Canyon Safety Plan, ensure compliance with company standards, codes and regulations and maintain documentation of compliance with the Aliso Canyon Safety Plan and GOs 95, 128 and 165. The Electrical Engineer is responsible for the inspection, maintenance, and modifications of the Aliso Canyon electrical systems.

4.6.2 Aliso Canyon Safety Committee

- Provide safety leadership at Aliso Canyon and promote a safety culture.
- Managers to be involved in safety committee meetings and ensure communication of safety related information to their employees.
- Use every meeting as an opportunity to discuss safety.
- Observe and review safe practices and have the authority to stop any job when safety is concerned.

- Actively work with management and leadership to communicate safety related issues.

4.6.3 Visibly set the example by our actions and involvement.

- Visibly make safety our #1 value, and advocate involvement.
- Begin every meeting with a discussion about safety, e.g., "What have you done lately to ensure safe behaviors?"
- Always demonstrate safe behaviors (e.g., wear Personal Protective Equipment (PPE), dress appropriately for work, perform the circle of safety).
- Conduct and/or be an active participant in safety meetings, emergency evacuation drills, etc.
- Actively engage in safety discussions and decisions. Be as involved in safety as you are with financial, customer service, reliability, and other key business issues.
- Observe, and positively reinforce safe behaviors; challenge at-risk behaviors (e.g., field rides, office visits, job observations, job site visits, etc.).
- Take all safety issues seriously, with immediate follow-up.
- Make an extra effort to instruct newer employees.

4.6.4 Instill a mindset that safety is everyone's responsibility.

- Hold people accountable for safe behaviors and ensure consequences for those who do not practice safe behaviors.
- Consistently ask direct reports what they have done for safety.
- Evaluate and provide feedback to direct reports based on contributions to safe behaviors and achieving safety vision.
- Solicit feedback from employees on safety issues during dialogue sessions, one-on-ones, area tours and safety meetings.
- Encourage employees to challenge other employees about at-risk behaviors.
- Take action when you see safety rule violations or at-risk conditions; do not look the other way when you see at-risk behaviors or conditions. Ensure corrective action is taken immediately.
- Take personal responsibility for ensuring a safe work environment.
- Look out for the safety of every fellow employee.

4.6.5 Constantly reinforce the safety vision and expectations of the organization.

- Communicate and reinforce the safety vision and values in discussions with your employees.
- Inform employees of their safety responsibilities and educate them on the advantages/requirements of working safely.
- Recognize employees for safe behavior consistently and often.
- Maintain an open-door policy for all levels of employees to discuss safety issues and concerns.
- Deliver "State of the State" safety status reports to all employees on a monthly or quarterly basis.

4.6.6 Provide appropriate tools, equipment, data analysis, procedures and training and other safety resources.

- Encourage employees to improve their skill sets, expertise and understanding of safe work practices.
- Ensure all employees are trained and qualified to do their job or are under close supervision for those jobs constituted as "on-the-job-training."
- Provide Smith System Driver Training to employees.
- Ensure appropriate tools and equipment is available to ensure all jobs are done safely.
- Ensure root cause analyses are thorough and complete.

4.6.7 Demonstrate urgency, and take accountability for resolving at-risk conditions, behaviors, or other roadblocks to safety.

- All work should be performed in a manner that prevents injuries and illnesses. If a job is not safe, find ways to make it safe.
- Conduct employee safety observations to ensure employees are adhering to all safety standards, e.g., office ergonomic evaluations, field rides, job site visits, etc.
- Conduct facility safety inspections regularly to identify at-risk conditions and at-risk behaviors and take preventive measures.
- Promptly evaluate the underlying factors of all incidents and take immediate corrective action. Also find out what is working well in certain work areas to leverage opportunities.
- Never allow shortcuts to safety, and never compromise health and safety for production. No activity is so important that it should jeopardize employee safety.

4.7 EXPECTATION OF ALL EMPLOYEES

- Ensure you are properly trained to perform your job safely.
- Participate in all safety meetings and training provided.
- Complete the Aliso Canyon Safety Orientation annually.
- Wear proper apparel and PPE for the task at hand.
- Follow all safety rules and stop when safety is in question.
- Report all incidents, near misses and at-risk conditions.
- Look out for the safety of others and challenge any at-risk behavior.
- Encourage a 24/7 safety commitment.

5 ALISO CANYON SAFETY COMMITTEE

5.1 STRUCTURE

The safety committee is established as a mutual and collaborative effort of management and union represented personnel. The committee typically consists of a represented person from each work group at Aliso, and several management personnel. The Plant Electrical Engineer will hold a permanent position on the committee. Persons selected to serve on the committee should be those who support the Company and the Union's efforts in safety and incident prevention.

5.1.1 Safety Committee Organizational Chart; Figure 2

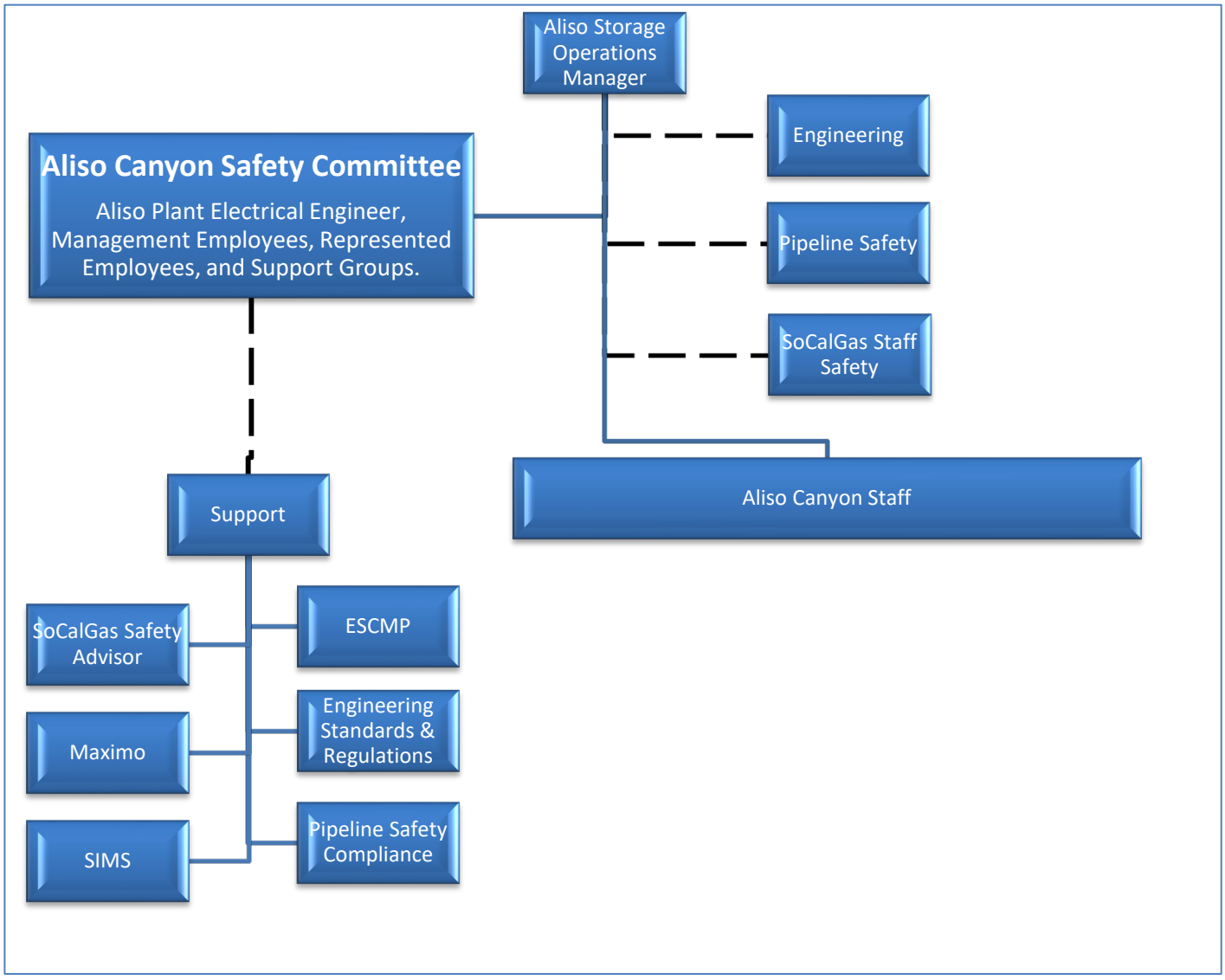


Figure 2 (Safety Committee Organizational Chart)

5.1.2 *Aliso Plant Electrical Engineer* will act in a lead role on the safety committee.

5.1.3 *Aliso Plant Electrical Engineer* provides facility electrical expertise and support with onsite direction for safe electrical practices and assist engineering in ensuring maintenance, electrical related projects, and regulations meet the safety needs of Aliso Canyon. Obtain support as needed for the safety committee from the Aliso Plant Engineer on safe gas practices and assistance in ensuring maintenance, gas related projects, and regulations meet the safety needs of Aliso Canyon.

5.1.4 *Aliso Storage Operations Manager* provides overall authority and support to the Aliso Canyon Safety Committee. Attends safety committee meetings as needed to support the safety committee. Has overall facility responsibility for the safe operation and maintenance at Aliso Canyon, and for compliance with all regulations. Approves safety committee findings and audits.

5.1.5 *Other Committee members* are to be involved in all aspects of safety with leadership that facilitates and communicates safety in operations, maintenance, engineering, technical support services, administrative, and environmental.

5.2 FUNCTION

The function of the Aliso Canyon Safety Committee is to work with corporate and site management to help recognize safety hazards and assist in finding corrective actions to better incorporate safe work practices and continue to meet state, federal, and local requirements. Assist in safety inspections, audits, and review and make Aliso specific recommendations for corrective actions.

5.3 ROLES AND RESPONSIBILITIES

The roles and responsibilities of the Safety Committee are flexible to meet the needs of the facility, but will consist of the following:

5.3.1 The safety committee leadership is responsible to ensure that all meetings are held, documented, and that follow up issues are addressed in a timely manner.

5.3.2 Aliso Canyon's safety specific needs are being addressed and communicated to management.

5.3.3 Safety committee audits and findings to be reviewed by Storage Operations Manager.

5.3.4 Stop any work that is found unsafe and report findings to the Storage Operations Manager.

5.3.5 Reviews and follows up with the SoCalGas staff safety advisor on noncompliance issues (SIMS) and documents findings, corrective action(s), and closure.

5.3.6 Assist engineering, environmental, compliance and maintenance managers in audits, inspections, and compliance issues.

5.3.7 Hold regular meetings to review safety related incidents, findings, and any regulation compliance issues.

5.3.8 Assist in identifying training requirements for Aliso Canyon and review audits, and annual training reviews with site managers and safety advisor.

5.3.9 Conduct and help plan local safety meetings.

5.3.10 Promote the idea that a person's individual safety must be his or her own responsibility. Most jobs (driving included) require an employee to work alone. Everything an employee does require total concentration on that activity to be able to perform the task properly and without incident.

5.3.11 Review *s*uggestions from employees pertaining to changes in safety programs, safety equipment, incentive programs, etc. and make recommendations to appropriate personnel for consideration.

5.3.12 Be familiar with the contents of the Company's Injury and Illness Prevention Program and be prepared to make recommendations for changes to local management or safety supervisor.

5.3.13 Be alert to the presence of any hazard or hazardous conditions. If necessary, secure the area and/or correct the hazard. Report these to a supervisor as soon as possible after discovery. Create a corrective work order in Maximo and send an email describing the issue to all members of the safety committee and assist with delivery of safety meetings and training.

5.3.14 Review industrial injury and motor vehicle incident reports and make recommendations on methods of prevention and protection to prevent a similar recurrence.

5.3.15 Communicate and coordinate safety/issues between work groups, all shifts, and other safety committees.

5.3.16 Assures compliance with the Aliso safety plan and assists with incident investigations and root cause findings.

6 ALISO CANYON EMPLOYEE TRAINING

The Aliso Canyon training program is required for all Aliso Canyon personnel, and it is the responsibility of management to conduct the required training throughout the year. Training is documented in accordance with Company procedures and tracked for all personnel on a training matrix. Records of completion of training requirements are audited annually as part of the ESCMP program. A list of the required training for Aliso Canyon personnel is included in Appendix K – *Aliso Canyon Training Courses*.

6.1 ALISO CANYON AWARENESS TRAINING

Aliso Canyon management, with the assistance of the Safety department and the Aliso Canyon Safety Committee, provides ongoing and regular safety training and safety awareness information to Aliso Canyon personnel. This includes fire awareness training, Gas Operations Power Shutoff procedures, and local fire department involvement and training onsite see Appendix I – *LA County Fire Department Regulations* for fire regulations.

6.1.1 On a daily basis, relevant safety issues are discussed and communicated to all employees. Contractors' location and activities are communicated as well.

6.2 TRAINING DEVELOPMENT

6.2.1 Developing Training Program - The Director – Safety Management Systems and/or designees are responsible for developing employee safety training programs that comply with applicable regulations and internal procedures.

6.2.2 Identifying and Scheduling Training – Aliso Canyon Station Operations Managers, Station Maintenance Supervisors and Station Operations Supervisors are responsible for annually identifying the appropriate safety training needed for their employees as defined in the Safety training matrices. Additionally, they must ensure that the identified mandatory safety training is completed and documented as described in the Safety Training Standards.

6.2.3 Annual Training Review – Aliso Canyon Storage Operations Manager and the Director of Storage are responsible for ensuring the training processes are in place and reviewed on an annual basis.

6.3 TRAINING AND INSTRUCTION

6.3.1 All employees, including managers and supervisors, shall have training and instruction on general and job-specific Safety practices and specific hazards associated with employee's job tasks. The required training is provided:

- To all employees given new job assignments for which training has not previously been received,
- Whenever new substances, processes, procedures, or equipment are introduced into the workplace and represent a new hazard, and
- For supervisors to familiarize them with the safety hazards to which employees under their immediate direction and control may be exposed and how to communicate information about those hazards effectively.

6.3.2 Training and instruction are provided depending on employee's job tasks and may include the following:

- How and when to use Personal Protective Equipment (PPE).
- Code of Safe Practices found in the Injury and Illness Prevention Program.
- Smith System Driving training.
- Potential hazards, protective measures and safety practices associated with new job assignments before exposure.
- Information on chemical hazards to which employees could be exposed and other hazard communication program information.
- Emergency action and fire prevention plans.

6.4 FIELD TRAINING

In support of gas standards, policies, and procedures at Aliso Canyon, the Field Training organization provides job specific training for all field employee groups. The training courses summarized in Appendix A – *Aliso Canyon Employee Training Overview* are delivered in detail without exception to each function/classification in all field job progressions.

Integrated within each training course for all job classifications is the Operator Qualification (OQ) Program (Department of Transportation (DOT) Operator Qualification Program as required by 49 Code of Federal Regulations part 192.801 through 192.809). Job specific OQ tasks include all appropriate training to demonstrate employee's skills, ability, and knowledge to perform the OQ tasks assigned to a specific job classification. The records for these qualifications are closely monitored and employees are re-trained when appropriate or updated whenever significant changes occur to an OQ task. Employees are periodically re-qualified as prescribed in the DOT OQ Program as noted above. Requalification timelines are established per OQ task not to exceed five (5) years.

Emergency Response is covered within our policies, procedures, gas standards, and within specific Operator Qualification tasks. These items are covered in detail within training courses for job classifications that have any activities or functions involved in Emergency Response.

7 INJURY AND ILLNESS PREVENTION PROGRAM

The purpose of this program is to outline the essential elements of SoCalGas' Injury and Illness Prevention Program (IIPP). CAL-OSHA referenced in Appendix H – Cal-OSHA.

7.1 ELEMENT #1: AUTHORITY AND RESPONSIBILITY FOR THE PROGRAM

7.1.1 *Chief Executive Officer:* Has overall authority and responsibility for implementation of the IIPP.

7.1.2 *Chief Safety Officer*: Provides policy guidance, compliance oversight, and executive safety leadership.

7.1.3 *Officers:* Have overall authority and responsibility for program implementation and performance in their areas.

7.1.4 *Directors*: Have direct authority and responsibility for program implementation and performance in their areas.

7.1.5 Department Heads/Managers and Supervisors: Have responsibility for implementing and maintaining the injury and illness program in their work areas and for answering questions about the Injury and Illness Prevention Program.

7.1.6 *All Employees*: Perform only work they are qualified to do in a safe and efficient manner.

7.1.7 Executive Safety Council: Review, and/or support company-wide initiatives for Safety and remove barriers that inhibit a strong safety program.

7.1.8 *Safety Department*: Specifies employee protection, interprets all applicable safety related regulations, creates safety policies and programs, identifies, and evaluates workplace hazards, periodically conducts Safety assessments, and manages health and safety functions.

7.2 ELEMENT #2: PROMOTING COMPLIANCE WITH SAFE AND HEALTHY WORK PRACTICES

7.2.1 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. Employees who fail to follow safety procedures and rules are subject to disciplinary action.

7.2.2 Management is responsible for ensuring all safety policies and procedures are clearly communicated and understood by all employees. Management is expected to enforce the rules fairly and consistently.

7.2.3 Personal recognition and award and recognition programs are used to recognize employees, organizations, and employee safety committees for safety leadership and performance. Refer to the Safety Recognition Policy for more details.

7.2.4 Our systems of ensuring all levels of employees comply with the rules and maintain a safe work environment include job observations, inspections, audits, incident evaluations, performance appraisals, and safety training as well as those mentioned in the above paragraphs.

7.2.5 Compliance deficiencies may indicate the need for additional employee training and/or re-training, revision of policies and procedures, review of equipment and tools, etc.

7.3 ELEMENT #3: COMMUNICATING WITH EMPLOYEES IN A READILY UNDERSTANDABLE FORM

7.3.1 Open, two-way communication between management and employees on Safety issues is essential to an injury-free, productive workplace. The following system of communication is used to ensure a continuous flow of information is shared:

7.3.1.1 Supervisors communicate Safety information with all employees to whom they provide work direction including office employees.

7.3.1.2 Employees report hazards, injuries, and incidents without fear of reprisal of any kind.

7.3.1.3 Various committees are as follows with their associated responsibilities:

- Executive Safety Council: Communicates to employees at regularly scheduled meetings to gain a deeper understanding of safety at the frontline.
- Safety Champions/ Safety Advocates: Provide local safety leadership and communications throughout the regions and departments.
- Safety Action Committees: Communicate between union and management on health and safety issues.
- Local Safety Committees: Create and maintain active interest in their department's safety issues and initiatives.

7.3.1.4 Injuries and incidents are communicated to the organization via the Safety Information Management System (SIMS).

7.3.1.5 Other means of communicating Safety issues are:

- Safety training, including formal training instructions such as the safety lesson plans and classroom training.
- Employee newsletter, safety bulletins, posters, Cal-OSHA Log and Summary of Occupational Injuries and Illnesses, Safety Standards, surveys, incident evaluation reports, Safety Department intranet website and MS Outlook public folders.
- Safety Committee Congress.
- Safety meetings, department staff meetings and tailgates.
- Office employees shall receive safety information through department staff meetings, safety meetings, and email alerts. The goal is to ensure office employees are provided safety information and opportunities to discuss safety issues.
- Safety meetings are as follows:
  - Every ten (10) days for employees engaged in field construction or construction associated activities.
  - Monthly for employees involved in operations, maintenance, or other manual work (employee who spend at least 50% of their time in the field).

- Other communication methods can be found in the Injury and Illness Prevention Program, Section V, *Communications*.

7.4 ELEMENT #4: IDENTIFYING AND EVALUATING WORK HAZARDS

7.4.1 Safety inspections are conducted to identify and evaluate hazards. Results of inspections will be documented and communicated to affected employees. In addition, job observations are conducted periodically to ensure employees are minimizing exposure to injury by using safe behaviors.

7.4.2 Periodic inspections are performed in each area depending on the hazards involved and are conducted at a frequency to ensure workplace safety. At a minimum, inspections should be conducted:

- Daily or weekly depending on project for construction areas and jobs.
- Semiannually for operating bases and office areas.
- Daily for Class A and B vehicles and forklifts.
- When new substances, processes, procedures, or equipment which present potential hazards are introduced into our workplace.
- When workplace conditions warrant an inspection, i.e., a new unidentified hazard is recognized, injury or illness occurs, etc.

7.4.3 Supervisors routinely observe their area(s) of responsibility and correct at-risk work practices and conditions.

7.4.4 Employees shall report immediately any hazardous conditions, defective tools or equipment, or at-risk procedures to their supervisor.

7.4.5 In addition, workplace hazards and at-risk work practices can be identified through safety committee meetings, safety meetings, job observations, incident statistics and incident evaluation reports, near misses, audits, safety assessments, and manufacturer warnings and information.

- All inspection records are retained for a minimum of one (1) year. Examples of inspection checklists and job observation forms can be found on the Safety department website.

7.5 ELEMENT #5: INVESTIGATING OCCUPATIONAL INJURIES AND ILLNESSES

7.5.1 Employees report all work-related incidents promptly to their supervisors.

7.5.2 Department heads/supervisors will investigate work-related injuries, illnesses, incidents, and near misses to determine underlying/contributing factors and actions necessary to prevent recurrences.

7.5.3 Incident evaluation procedures include:

- Proper notification is made.
- Visit the incident scene as soon as possible.
- Interview injured employees and witnesses.
- Examine all factors associated with the incident.
- Determine the contributing factors of the incident.
- Develop and implement corrective actions to prevent reoccurrence.
- Document the findings and corrective actions using SIMS.

7.6 ELEMENT #6: CORRECTING AT-RISK OR UNHEALTHY CONDITIONS, WORK PRACTICES AND PROCEDURES IN A TIMELY MANNER

7.6.1 At-risk and unhealthy work conditions, practices, or procedures shall be corrected promptly.

7.6.2 Supervisors correct and control identified hazards as soon as practical. When hazards are beyond supervisor's authority, supervisor communicates hazardous conditions, with recommended corrective action, to management and/or Safety for assistance.

7.6.3 When a hazard is identified, the following steps are taken:

- Eliminate the hazard source immediately if practical.
- Take immediate temporary action until permanent controls are in place.
- Permanent controls are done in this order:
  - If practical, build engineering controls into the process and eliminate the hazard. Examples are: use barriers or mechanical guards; provide ventilation; substitute less hazardous substances; change the design; etc.
  - Apply administrative controls to reduce or limit employees' exposure to hazards. They include training, personal hygiene, and reduction of employee exposure time.
  - Provide personal protective equipment to the employee. It must be correct for the hazard. This includes eye and face protection, protective coveralls, respirators, gloves, foot protection, head protection, etc.

7.6.4 When an imminent hazard exists, and cannot be abated immediately, all exposed persons must leave the area. Only properly trained and equipped employees are allowed to correct imminent hazards.

7.6.5 A serious concealed danger is one which, (1) results from normal company operations, (2) poses a substantial probability of death or great bodily harm, and (3) is not readily apparent to the

individual who is likely to be exposed. For these conditions that cannot be corrected immediately, take the following steps:

- Exercise stop work authority.
- Notify and remove the employee(s).
- Contact a supervisor and Field Safety Advisor.
- Outside normal working hours, contact the SoCalGas Message Center and ask for the on-call Field Safety Advisor.
- If corrections cannot be made within fifteen (15) days, Safety must report the condition to Cal-OSHA.

7.6.6 Records of hazard control actions must be retained by each department for a minimum of three (3) years.

8 ALISO CANYON INSPECTION COMPLIANCE AND RECORDKEEPING

In support of all applicable Gas and Electrical standards, policies, regulations, and procedures Aliso Canyon has programs and processes in place to identify, document, and track completion of all required work, as well as to review and audit compliance with applicable requirements. These include the use of the MAXIMO computerized maintenance management system for scheduling and tracking maintenance, inspections, and follow-up corrective activities. In addition, the Environmental and Safety Compliance Management Program (ESCMP) is implemented to establish procedures and define roles and responsibilities necessary to ensure conformance to the Injury and Illness Prevention Program and other Safety requirements, and the Safety Information Management System (SIMS) is used to document and track safety inspections, incident/accident investigations, and corrective actions. Each of these programs are described and defined in detail below.

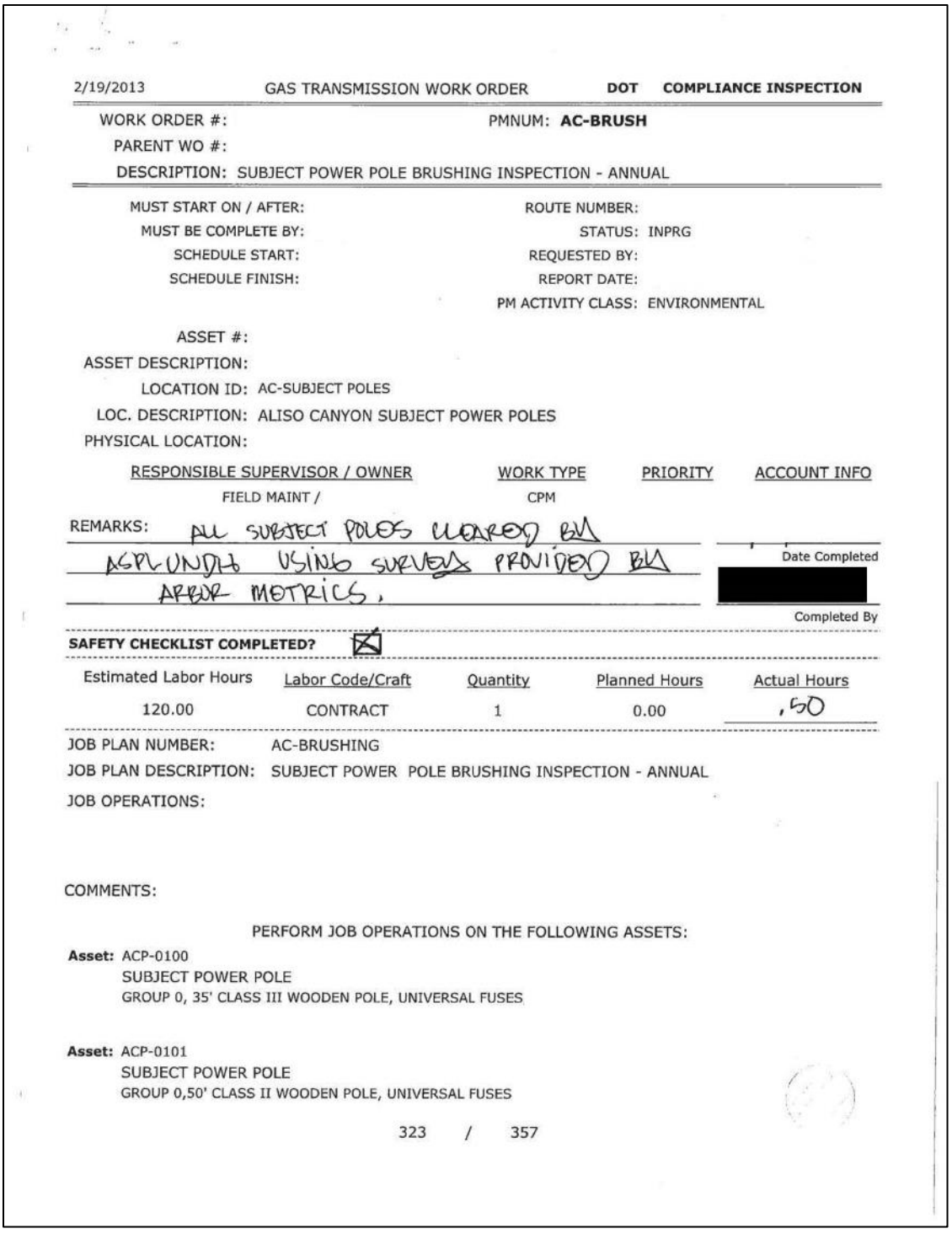
8.1 MAXIMO

The IBM MAXIMO computerized maintenance management system is an integrated productivity tool and database that helps manage assets on a single software platform. MAXIMO provides a comprehensive view of all asset types, their conditions and location, and the work processes that support them, to provide planning, audit, and compliance capability.

All maintenance work performed by Storage Operations personnel on pipelines, equipment, and facilities is planned, scheduled, and documented using MAXIMO, in accordance with Company Gas Standard 223.0375, *MAXIMO – Transmission and Storage Operations*. This includes maintenance work required by the DOT, California Public Utilities Commission (CPUC), and California Geologic Energy Management Division (CalGEM), and maintenance work that is not mandated by a regulatory agency or entity.

All pipeline, facility or maintenance data, including all scheduled (planned) and corrective (reactive) maintenance work is entered or uploaded into MAXIMO by various work groups consistently and accurately to facilitate; creating/generating work orders; scheduling and tracking work activities and querying/creating reports on the maintenance work or assets in the system. An example of a common MAXIMO compliance record is included below in Figure 3.

Figure 3 (Example: CPM MAXIMO)



2/19/2013 GAS TRANSMISSION WORK ORDER **DOT COMPLIANCE INSPECTION**

WORK ORDER #: PMNUM: **AC-BRUSH**
PARENT WO #:
DESCRIPTION: SUBJECT POWER POLE BRUSHING INSPECTION - ANNUAL

MUST START ON / AFTER: ROUTE NUMBER:
MUST BE COMPLETE BY: STATUS: INPRG
SCHEDULE START: REQUESTED BY:
SCHEDULE FINISH: REPORT DATE:
PM ACTIVITY CLASS: ENVIRONMENTAL

ASSET #:
ASSET DESCRIPTION:
LOCATION ID: AC-SUBJECT POLES
LOC. DESCRIPTION: ALISO CANYON SUBJECT POWER POLES
PHYSICAL LOCATION:

RESPONSIBLE SUPERVISOR / OWNER	WORK TYPE	PRIORITY	ACCOUNT INFO
FIELD MAINT /	CPM		

REMARKS: ALL SUBJECT POLES CLEARED BY AGPLUNDH USING SURVEYS PROVIDED BY ARBOR METRICS.

Date Completed [redacted]
Completed By

SAFETY CHECKLIST COMPLETED? ☒

Estimated Labor Hours	Labor Code/Craft	Quantity	Planned Hours	Actual Hours
120.00	CONTRACT	1	0.00	.50

JOB PLAN NUMBER: AC-BRUSHING
JOB PLAN DESCRIPTION: SUBJECT POWER POLE BRUSHING INSPECTION - ANNUAL
JOB OPERATIONS:

COMMENTS:

PERFORM JOB OPERATIONS ON THE FOLLOWING ASSETS:

Asset: ACP-0100
SUBJECT POWER POLE
GROUP 0, 35' CLASS III WOODEN POLE, UNIVERSAL FUSES

Asset: ACP-0101
SUBJECT POWER POLE
GROUP 0,50' CLASS II WOODEN POLE, UNIVERSAL FUSES

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8.2 ENVIRONMENTAL AND SAFETY COMPLIANCE MANAGEMENT PROGRAM (ESCMP)

Establish procedures and define roles and responsibilities necessary to ensure conformance to the Injury and Illness Prevention Program and other Safety requirements.

POLICY AND SCOPE

Aliso Canyon is committed to ensuring the safety of our employees and protecting and conserving the environment, customers, and the communities. We are committed to complying with all applicable federal, state, and local safety laws, rules and regulations, and SoCalGas Standards. This Environmental and Safety Compliance Management Program (ESCMP) standard establishes processes that foster compliance with our Injury and Illness Prevention Program (IIPP), and all other applicable safety requirements.

8.2.1 COMPLIANCE

- **Compliance** – All employees are responsible for complying with all applicable laws, rules, and regulations as well as the requirements of the internal policies, practices, and procedures as published in the IIPP and other Safety Standards and maintained on the Safety intranet sites.
- **Policies and Procedures** – The Director - Safety Management Systems and his/her designees will regularly identify safety laws and regulations applicable to SoCalGas and, as needed, establish internal policies, practices, and procedures to foster ongoing compliance.

8.2.2 ASSESSMENT OF COMPLIANCE

- **Self-Assessment Process** – Aliso Canyon Storage Operations Manager, with support of the Field Safety Advisors, is responsible for conducting self-assessments of Company facilities and operations as set forth in the Safety Standard (Gas Standard 167.33 – *Safety Inspections and ESCMP Safety Self-Assessments*). The purpose of the self-assessments is to: assess compliance with the applicable safety regulatory requirements and internal Company policies; identify areas, actions or activities that are not consistent with regulatory requirements or internal policies; and develop the appropriate corrective action(s). The information obtained during these inspections and self-assessments may also result in changes to internal Company policies or training.
- **ESCMP Management Review Process** – The Director of Safety Management Systems and the Director of Environmental Services and his/her designees are responsible for distributing ESCMP communications, conducting the annual ESCMP management review, compiling the findings, and developing recommendations and goals with executives.
  - **ESCMP Communications** – Periodic communications are distributed to provide ESCMP updates and reminders. Quarterly reports on the status of the ESCMP goals and on the status of ESCMP open corrective actions pertaining to safety are prepared and distributed by the end of the month following the close of each quarter.
  - **Safety ESCMP and Environmental ESCMP Year-end Certifications** – Safety and Environmental ESCMP certifications, one for Aliso Canyon compliance and one for employee-based compliance, are distributed at year-end. These documents contain questions that review compliance processes.

- The Safety and Environmental ESCMP Facility-Based Year-end Checklist is a combined safety and environmental ESCMP checklist signed by the Aliso Canyon Storage Operations Manager and the Director of Storage to address safety and environmental permitting, spill reporting, and other safety and environmental facility-based compliance concerns.
- The Safety and Environmental ESCMP Employee-Based Year-end Checklist is a combined safety and environmental ESCMP checklist signed by Vice Presidents and their Direct Reports regarding the employees in their organizations. It addresses safety and environmental training, awareness, and other safety and environmental employee-based concerns.

➢ **Review, Verify and Certify** – Prior to certifying an ESCMP year-end checklist, it is important that a thorough review is conducted to verify that compliance processes and activities ensure compliance with safety and environmental laws and regulations and Company policies and procedures. Electronic approval of the checklist certifies that to the best of the approver's knowledge, after all appropriate inquiry, all entries are true, accurate and complete. The annual reviews create an opportunity to identify gaps in compliance and implement corrective measures. The checklist review is completed through the end of each year and due back to the Director – Safety Management Systems and the Director of Environmental Services by early-January. The Aliso Canyon Storage Operations Manager or the Director of Storage, or their designees, must provide quarterly updates on the status of open corrective actions to Safety and Environmental Services until properly closed.

8.2.3 RECORDS

- **Compliance Records** – Compliance records are maintained as an integral part of each safety program or procedure. These records are retained as directed in each respective program or procedure to satisfy applicable legal and Company requirements.
- **Electronic ESCMP Year-End Checklists** – The checklists are completed by the Aliso Canyon Storage Operations Manager or the Director of Storage (for Employee-based) and approved by in-line Director and Vice President and Senior Vice President electronically and kept in the ESCMP database system for four (4) years.
- **Records Retention** – Management of Company records must adhere to the SoCalGas Record Retention Schedule and Policy.

8.3 SAFETY INFORMATION MANAGEMENT SYSTEM (SIMS)

Using SIMS maintains compliance with policy requirements of both the Injury and Illness Prevention Program (IIPP) and the Environmental and Safety Compliance Management Program (ESCMP).

8.3.1 All inspections are recorded in the Safety Information Management System (SIMS). Entries include the person or person(s) conducting the inspection, the at-risk condition or work practices identified, and the actions taken to correct the identified condition or work practice. Inspection forms can be found at the Safety website.

8.3.2 Inspection records are retained in SIMS.

8.4 INSPECTIONS

At Aliso Canyon, safety inspections are a principal means of identifying potential hazards and help to determine what safeguarding is necessary to prevent incidents, injuries, and occupational illnesses. Safety inspections are equally important to incident prevention.

Finding at-risk conditions and work practices through inspections, and promptly correcting them, are among the best management tools of incident prevention. Each time an inspection occurs, management's interest in safety is demonstrated. Inspections are a basic tool for maintaining safe conditions and checking at-risk behaviors. They capture a "snapshot" of work environments or conditions for effective follow-up.

Typically, inspections focus on the work practices, operations, equipment, and environment in which hazards may be present. Inspections are sometimes part of audits.

8.4.1 INSPECTIONS DIFFER FROM AUDITS

Routinely, inspections are done to look for physical hazards within a workplace or jobsite and to ensure the workplace is free of such hazards. Audits typically examine all elements of safety/environmental programs for compliance and performance purposes. For example, audits examine regulation compliance, training, and documentation as well as the physical hazards noted in inspections.

8.4.2 INSPECTIONS - SUMMARY

Aliso Canyon Storage Operations Manager (or designee) conducts safety inspections of the facility and the results are entered into the Safety Information Management System (SIMS).

Safety inspections are conducted using the Inspection Checklist of Facilities and Grounds Appendix C — *Semi Annual Safety Inspection Checklists for Facilities and Grounds* and Appendix D – *ESCMP Annual Safety Inspection Checklist for Transmission Facilities and Grounds*. Items reviewed on the checklist, who reviewed them, and the findings of the safety inspection are documented in SIMS, along with corrective actions for issues needing attention. The manager is responsible to ensure the corrective action items are completed within a timeframe specified in SIMS. Any issues that could cause imminent danger are corrected immediately.

8.4.3 ESCMP SAFETY SELF-ASSESSMENTS

The Field Safety Advisor (FSA), with support of Aliso Canyon Storage Operations Manager and the safety committee, is responsible for conducting an annual safety self-assessment of the facility

and operations as set forth in the Gas Standard 167.33 – *Safety Inspections and ESCMP Safety Self-Assessments*.

The annual safety self-assessment is conducted using the Safety Self-Assessment Checklist Appendix C — *Semi Annual Safety Inspection Checklist for Facilities and Grounds* and Appendix D – *ESCMP Annual Safety Inspection Checklist for Transmission Facilities and Grounds*. Items reviewed on the checklist, who reviewed them, and the findings of the safety self-assessment are documented in SIMS. Any corrective actions are documented by the FSA in SIMS. The Storage Operations Manager (or designee) is responsible to ensure the corrective action items are completed within a timeframe specified in SIMS. Any issues that could cause imminent danger are corrected immediately. The safety committee will follow up and document findings, corrective action(s), and closure with the FSA.

9 CONTRACTOR SAFETY PROGRAM

9.1 PURPOSE

To outline the safety requirements for any contractor performing work for Southern California Gas Company (SoCalGas) and to establish responsibilities for Company employees with respect to contractor safety issues.

9.2 POLICY AND SCOPE

9.2.1 SoCalGas' commitment to safety, health, and environmental management is evident in the Sempra Energy's Safety and Environmental Policies. Contractors working for SoCalGas are required to comply with all federal, state, and local laws, ordinances, and regulations and ensure the safety and environmental compliance of their employees, as well as ensuring their operations do not impact the safety of SoCalGas employees and the public.

9.2.2 It is the Company's policy to maintain an owner-contractor relationship with all contractors providing labor and other services to the Company. In terms of safety, SoCalGas specify that the contractor shall abide by applicable safety laws, regulations, etc., but it is not our responsibility to interpret or enforce safety rules for the contractor. This standard practice establishes guidelines for SoCalGas employees relative to the safety efforts of its contractors.

9.3 CONTRACT REQUIREMENTS

9.3.1 Prior to commencement of work, the contractor and SoCalGas representative shall review the project scope and determine specific relevant health, safety, and environmental regulations. At a minimum, the contractor shall be required to abide by all applicable federal, state, and local environmental, health, and safety laws and regulations, meet the insurance requirements, and have a written Injury and Illness Prevention Program.

- If requested, provide historical data on safety performance such as OSHA 300 logs.
- Ensure that the contractor's employees and all subcontractors have the proper tools, resources, work practices, and appropriate training when required by statute/regulation and the Company specific operating requirements and provide such documentation upon request.

9.3.2 When required for environmentally sensitive or other potentially hazardous projects, the contractor may be required to provide additional documentation such as, but not limited to:

- Environmental, Safety, and Health Plan.
- Fire Prevention and Protection Plan.
- All required training, certifications, medical exams, Material Safety Data Sheets (SDS), etc., for his or her employees or operations at the pre-job meeting.
- Specialized Environmental, Safety or Health Program(s).

9.4 PRE-WORK MEETING

9.4.1 Pre-work meetings shall be held to discuss specific environmental, safety, and/or health issues for the job or facility. The following are examples of the information that shall be discussed, but are not limited to:

- Hazard Information.
- Hazardous Materials.
- Prohibited Materials.
- Handling and Disposal of Hazardous Waste.
- Environmental Permit Compliance.
- Specific safety rules and requirements to ensure safe work practices are followed according to this Contractor Safety Program.
- Reporting of Incidents.
- Enforcement and Reporting of Post-Accident Testing.
- Emergency Response.
- Important phone numbers and general information.

See Appendix J – *SoCalGas Jobsite Safety Meeting Checklist*

9.5 NONCOMPLIANCE WITH SAFETY AND HEALTH REQUIREMENTS

9.5.1 It is important that the independent status of a contractor is maintained in all Company contract relationships. There is no employer-employee relationship between the Company and any of its contractors or the contractor's employees.

9.5.2 The Company reserves the right to take action which includes warnings up to termination of contract if contractor has repeated non-compliance with safety and health requirements or observed safety hazards.

9.6 RESPONSIBILITIES

9.6.1 SoCalGas Representative:

- Storage Operations Manager has overall responsibility for implementation and oversight of the contractor safety program at Aliso Canyon.
- Ensure contractors complete the Aliso Canyon Safety Orientation prior to beginning work at the storage field.
- Oversees contractor performance relative to cost, schedule, quality, customer satisfaction, safety, federal, state, and local regulations, as well as specific operating requirements of the site.
- Attends and participates in meetings on an "as-needed" basis, including pre-construction meeting, construction status meetings, contractor safety meetings, etc., held with contractor.
- Provides each contractor with information regarding the known specific hazards and any required PPE.

- Primary point of contact for all incidents, complaints, and inspections by governmental agencies.

9.6.2 Contractor:

- Meets all contractual agreements and provides a safe and healthy workplace for its employees.
- Completes the Aliso Canyon Safety Orientation prior to beginning work at the storage field.
- Complies with all federal, state, and local regulations and any site-specific operating requirements specified by the Company.
- Corrects any hazardous condition identified.
- Notifies the SoCalGas representative immediately of any project related incidents resulting in OSHA recordable injuries, serious near misses, or any injury or property damage involving the public.
- Provides written report of investigation pertaining to any project-related incident, including serious near misses.

9.6.3 Site Manager(s), Supervisor(s), and Project Manager(s):

- Notifies the SoCalGas representative of any hazardous working conditions at the site that may impact the contractor.
- Advises the SoCalGas representative of any complaints of unsafe practices being performed by the contractor.
- Takes the following actions if a contractor's work creates an imminent hazard:
  - Directs contractor to stop work.
  - Requests contractor employees, in proximity to the hazard, to immediately mitigate the hazard.
  - Ensures contractors submit proper documentation.

9.6.4 SoCalGas Employee(s):

- Stays out of contractor construction zones unless it is necessary to enter for required job duties.
- Wears proper clothing, footwear, and all required PPE if required to enter construction zone.
- Reports unsafe acts or conditions to their supervisors who will relay the information to the SoCalGas representative.
- Takes action to prevent any person from entering a situation, which poses immediate potential for serious injury or death.

9.6.5 Aliso Canyon Safety Committee:

- Participates in contractor safety and pre-construction meetings as necessary and assist in communicating Aliso Canyon's safety concerns and requirements.
- Wears proper clothing, footwear, and all required PPE if required to enter construction zone.
- Reports unsafe acts or conditions and/or stops the job and reports information to the committee facilitator.
- Takes action to prevent any person from entering a situation which poses immediate potential for serious injury or death.

10 GAS REGULATORY REQUIREMENTS

A summary of the regulatory requirements and general actions and activities that Aliso Canyon performs to meet these requirements is included below. A detailed listing of the policies, procedures, and programs that are applicable to gas storage operations at Aliso Canyon are included in Appendix E – *Gas Storage O&M Policies and Procedures*. Each procedure contains detailed descriptions of required actions, roles, responsibilities, and regulatory requirements. Additionally, a detailed listing of local operations and maintenance procedures that have been developed specifically for Aliso Canyon is included in Appendix F – *Aliso Canyon Local O&M Procedures*.

In accordance with General Order 112-E and by incorporation, 49 CFR Part 192 referenced in Appendix B – *Gas Regulation Policies and Requirements*, SoCalGas has implemented and follows policies, procedures and programs that govern the design, construction, installation, operation, maintenance, and determination of maximum allowable operating pressure for gas transmission and distribution facilities. These policies, procedures and programs are updated in a timely manner as appropriate in response to changes in regulation, safety advisories, and other safety information. These policies, procedures and programs have been developed to fit the needs of Aliso Canyon and comply with the code requirements and are summarized as follows:

10.1 DESIGN

49 CFR Part 192 Subparts B, C, and D specify the minimum requirements for the material selection and design of pipe and pipeline components. SoCalGas' transmission and distribution pipe and facilities are designed with approved materials that have sufficient wall thickness and/or adequate protection to withstand anticipated external pressures and loads that will be imposed on the pipe after installation. The pipe and facilities are also designed with materials of sufficient strength to contain internal pressures plus appropriate design and/or safety factors. Components, including valves, flanges, and fittings meet the minimum prescribed requirements specified in the regulations. The design also includes pressure relief or other protective devices to prevent accidental over pressurization as further described in the maintenance section.

10.2 CONSTRUCTION

49 CFR Part 192 Subparts E, F, G and J specify the minimum requirements for the construction and testing of transmission and distribution facilities, including the welding and joining pipe and components as well as the protection of the pipe and facilities from hazards such as unstable soil, landslides, and other hazards that may cause the pipe to move or sustain abnormal loads. SoCalGas' transmission and distribution pipe and facilities are to be constructed in accordance with these requirements.

10.3 INSTALLATION

49 CFR Part 192 Subpart H specifies the minimum requirements for the installation of distribution service lines, service regulators, and customer meters. These requirements include specifications pertaining to the location of this infrastructure, protection from damage, and valve requirements. SoCalGas' service lines, service regulators, and customer meters are to be installed in accordance with these requirements.

10.4 INTEGRITY MANAGEMENT

49 CFR Part 192 Subpart 191.12 and 14 CCR Title 14 Subpart 1726 require that storage operators develop, implement, and document a program to manage risk. As such, SoCalGas has in place the Storage Integrity Management Program (SIMP), with the objective of mitigating safety-related risks using a forward looking

and in-depth approach. SIMP accomplishes this objective with enhanced risk management activities, processes, and procedures for well integrity. SIMP is a comprehensive program to enhance the safety of SoCalGas's underground storage facilities through integrity management practices. By design for this period, SIMP also aligned with SoCalGas's Risk Assessment Mitigation Phase ("RAMP") Report activities, which support mitigation of risk-based events related to storage well integrity and is prioritized based on safety and overall infrastructure condition, considerations for regulatory compliance deadlines, and gas system operation and planning requirements.

10.5 MAINTENANCE

49 CFR Part 192 Subparts M and I specify the minimum requirements for the maintenance of transmission and distribution pipe facilities along with the associated corrosion protection facilities. Maintenance activities include the patrolling of pipeline, performing leakage surveys, monitoring performance of corrosion protection systems, making repairs, inspection and testing of pressure limiting and regulating equipment, and valve and vault inspection and upkeep. SoCalGas maintains its pipelines and facilities in accordance with these requirements. SoCalGas' patrol, leak survey, pressure limiting, valve and vault maintenance activities are further explained as follows:

10.5.1 *PATROL* – Pipeline patrols are performed to look for indications of pipeline leaks, missing pipeline markers, construction activity, right-of-way encroachment and other factors that may threaten the pipeline. These patrols are to be performed at specified frequencies dependent upon the type of facility and its location.

10.5.2 *LEAK SURVEY* – SoCalGas conducts leakage surveys of its pipelines at frequencies that are specified in the regulations. These surveys are typically conducted using combustible gas detectors. Leak indications are to be recorded and assigned a priority code based upon the concentration of gas recorded by the instrument as well as other relevant factors that may exist in proximity to its location. The highest priority leaks are to be continuously monitored and repaired promptly. Small leaks that pose little threat to the public are to be monitored and repaired based on operating conditions.

10.5.3 *PRESSURE MONITOR AND CONTROL* – Each pipeline system receives supply from higher pressure pipelines connected to the integrated system. Equipment exists between systems to regulate and control the pressure in each pipeline. Failure of pressure control equipment could result in the accidental over-pressurization of pipelines not designed to withstand the higher pressure of the upstream system. Accordingly, the pipeline systems are to be equipped with appropriate secondary pressure relieving, regulating, or limiting devices that will activate in the event the primary pressure control device fails. The design and use of all gas pressure relieving devices are to conform to appropriate agency regulations and orders. These devices are to have sufficient capacity and be set to prevent the over-pressurization of pipe and pipeline components commensurate with regulatory requirements.

10.5.4 *PRESSURE RELIEF DEVICES* – At pressure limiting stations and pressure regulating stations must have sufficient capacity to protect the facilities to which they are connected. Each pressure limiting station, relief device (except rupture discs), signaling device, and pressure regulating station, and its equipment must be inspected once per year. These inspections verify that the equipment is:

- In good mechanical condition,

- Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed,
- Set to control or relieve at the correct pressure consistent with the pressure limits of applicable regulatory requirements, and
- Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.
- Any defective or inadequate equipment found must be promptly repaired or replaced.

10.5.5 *CORROSION CONTROL* – Requirements for the protection of metallic pipelines from external, internal, and atmospheric corrosion are prescribed in Subpart I – *Requirements for Corrosion Control*. Corrosion control activities include:

- The use of protective coatings and paints to prevent a corrosive atmospheric or soil environment from coming in contact with the external steel surface.
- For the external surface of buried steel, the use of Cathodic Protection (CP) systems. CP is a technology that uses direct electrical current to counteract the normal corrosion of a metal pipeline.
- Management of the composition of the gas in the pipeline to prevent the formation of a corrosive environment and prevent internal corrosion.

10.5.6 *VALVE MAINTENANCE* – SoCalGas performs maintenance and inspection activities on all valves that may be necessary for the safe operation of its natural gas system. These valves include system isolation valves, inlet and outlet valves to regulator stations, bridge approach valves, and high-pressure line sectionalizing valves. All identified valves are to be checked and serviced at least once each calendar year. Routine maintenance and inspection activities verify:

- Valve is not leaking.
- Valve is properly identified.
- Valves are adequately lubricated.
- Valve operation is verified.

Any issues requiring immediate action are to be addressed right away. All required follow-up work is managed through the issuance of an appropriate work order to perform needed repair or maintenance activities.

10.5.7 *VAULT MAINTENANCE* – Underground vaults typically house pressure regulating or pressure limiting equipment. The purpose of the vault is to allow access to the equipment for inspection, maintenance, and repair activities. SoCalGas performs routine maintenance and inspection on all underground vaults. Vault maintenance normally coincides with the scheduled maintenance of the equipment housed within the vault. These inspections are to be completed once per year. Routine maintenance and inspection activities for underground vaults include:

- Proper operation of ventilation equipment, if so equipped,
- Structural condition of vault walls, floor, ladders, steps, handrails, etc.,
- Structural condition and operation of cover, include hinges and locking, and
- Correct for any presence of water, trash, or other foreign substances.

Any issues requiring immediate action are to be addressed right away. All required follow-up work is managed through the issuance of an appropriate work order to perform needed repair or maintenance activities.

10.6 OPERATIONS

49 CFR Part 192 Subparts Land K specify the minimum requirements for the operation of transmission and distribution pipeline facilities. Operational activities are included in the Operation and Maintenance (O&M) plan described in Chapter 4 – *Safety Systems* and include the Emergency Response Plan described in Chapter 5 – *Emergency Response* of the Natural Gas System Operator Safety Plan. The operation of the pipeline also includes requirements for a public awareness program, damage prevention program, control room management procedures, odorization of gas, and identification of changes in population density along certain transmission lines, and the determination of maximum allowable operating pressure including requirements for increasing the maximum allowable operating pressure. SoCalGas operates its pipelines and facilities in accordance with these requirements:

10.6.1 *PUBLIC AWARENESS PROGRAM* – The regulations governing public awareness programs require pipeline operators to provide the following elements:

- Damage prevention awareness for excavators.
- Emergency plans for fire, police, and public officials.
- Public Education.

The Public Awareness Program includes elements for the education of the affected public, government organizations and excavators including, but not limited to:

- The 811 one-call notification system which is to be used prior to excavation as well as other damage prevention methods,
- The possible hazards associated with unintended releases from a gas pipeline facility,
- Physical indications of a pipeline release of gas,
- Public safety measures to be taken in the event of a pipeline gas release; and
- Procedures to report a pipeline release.

The Public Awareness Program identifies specific audiences to be considered for targeted communications, the frequency of the communication for each audience, and the method of delivery. Many different audiences receive SoCalGas communications, including:

- Customers.
- Excavators and land developers.
- Public officials - school districts, city, and county managers.
- Emergency officials.
- Residents and places of congregation along transmission lines.
- Residents within the distribution service territory.

- Residents near compressor stations and underground natural gas storage fields.

10.6.2 *DAMAGE PREVENTION PROGRAM* – The purpose of the Damage Prevention Program is to avert gas incidents -- such as dig-ins to SoCalGas pipelines -- and thereby improve public safety and property protection through public education and outreach activities. SoCalGas continues to promote awareness of the Underground Service Alert (811, "Call-Before-You Dig") system by reaching out to contractors and the general public through meetings, mailers, bill inserts, the company website, and other methods, so that gas lines are properly marked before excavation activities. Pipeline markers are to be accurate and visible. Excavation activity includes excavation, blasting, boring, tunneling, backfilling, the removal of aboveground structures by both explosive or mechanical means, and other earth-moving operations.

10.6.3 *CONTROL ROOM MANAGEMENT* – Gas Control monitors and/or controls pipeline facilities on a 24/7 basis. Gas Control personnel are Operator Qualified per 49 CFR 192 Subpart N and are to maintain pipeline pressures and gas flows within established safe limits while meeting customer supply demands.

In the event of an emergency, Gas Control personnel have the ability to stop the flow of gas to a given area, or reroute it, depending on the situation. Gas Control works with the Transmission Command Post, which communicates with the Emergency Operations Center and Gas Emergency Centers, to coordinate activities during an emergency. Gas Control personnel also participate in emergency drills. A fully functional back-up center is maintained and available for use during an emergency.

SoCalGas has a control room management program that is integrated with other operating and emergency procedures. Key elements of the control room management plan include:

- Definition of controllers' roles and responsibilities.
- Definition of information, tools, procedures, and process controllers.
- A fatigue management program.
- An alarm management plan.
- A change management plan to address handling, approving, and implementing changes in pipeline equipment, monitoring, and operation.
- A means to incorporate operating experience into control room management procedures, an established controller training program, compliance validation to meet federal and/or state agencies, and records and documentation that demonstrate compliance with plan mandates.

10.6.4 *ODORIZATION* – In its native state, natural gas is typically odorless. In compliance with regulations and as a primary safety measure, SoCalGas adds chemical compounds to the gas. These chemical compounds produce the distinctive odor associated with natural gas and serve as a means to detect a gas leak. Odor strength is to be maintained at a level so that gas may be readily detectable. The odor level is to be monitored at least monthly at representative locations for verification of odorization adequacy.

10.6.5 *POPULATION DENSITY* – 49 CFR 192 requires that changes in population density, known as location class, be monitored for certain transmission pipelines. The SoCalGas transmission pipeline system is modeled in a Geographic Information System (GIS). The GIS uses

geographic data, aerial photography, data collected in the field, publicly available data sets and the identification of building and dwelling points to determine class location. Maps with class designations are used by operations personnel to look for changed conditions. Observed changes are to be recorded by marking up or redlining a location class map or completing a form designed to record such changes.

10.6.6 *MAXIMUM ALLOWABLE OPERATING PRESSURE* – A maximum allowable operating pressure (MAOP) is established for each pipeline or piping system. The established MAOP cannot exceed the maximum pressure allowed by regulatory code as specified in 49 CFR subpart 192.611 and 49 CFR subpart 192.619 - 49 CFR subpart 192.623 as applicable. The location, class, design, testing, and operating history is all factors that can limit the MAOP of a pipeline or system.

11 ELECTRICAL REGULATORY REQUIREMENTS

In accordance with General Order 95, 128, and 165; Aliso Canyon has implemented and follows policies and procedures that govern the design, construction, and maintenance for overhead and underground line design, the application of which will ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation, or use of overhead lines and to the public in general.

The procedures and policies associated with this section are listed in the Appendix G – *Electrical Regulation Policies and Requirements*. SoCalGas' Electric distribution systems generally consist of overhead distribution to each facility. When new electrical distribution equipment is added, it is regarded as "inspected" on the date of installation. The new equipment is then scheduled for inspection during the next applicable inspection cycle. All electrical distribution structures and equipment in the current inventory is scheduled for inspection as required by General Oder 165 in intervals of three (3) to five (5) years, except for the overhead structures and facilities that is patrolled annually due to the high fire danger of Aliso canyon. All equipment on a given structure is inspected at the same time. The inspection record is documented in the structure record, any problems identified along with the nature of the work for the correction action.

The maintenance goals for the year historically have been determined by the system-wide counts of facilities in each inspection type and priority, divided by the number of years in the cycle length. This practice created inspection cycles that set the maintenance goals for the year. The goals for the year are determined by the last inspection date. SoCalGas' maintenance cycles are designed to meet or exceed the GO 165 requirements.

SoCalGas employs a fulltime facility electrical engineer based at Aliso Canyon to oversee facility safety and regulatory compliance for SoCalGas' Aliso Canyon electric systems.

11.1 ELECTRICAL MAINTENANCE CYCLE

11.1.1 OHVI (Overhead Visual, 5-year) – This cycle consists of a detailed inspection of all distribution power poles, pole-mounted facilities with primary and secondary conductors, and distribution equipment on transmission poles. These inspections identify conditions that are out of compliance with GO 165 and GO 95. This is a five-year cycle.

11.1.2 ABOVEGROUND 5 (INTERNAL AND EXTERNAL INSPECTIONS) – This cycle consists of Above Ground Dead-front (AGE) and Above Ground Live-front (AGI) detailed external and internal inspections of dead-front and live-front pad-mounted facilities to identify conditions out of compliance with GO 165 and GO 128.

11.1.3 AGE (Above Ground Dead-front, 5-year) – This cycle consists of a detailed external and internal inspection of dead-front pad-mounted facilities to identify conditions out of compliance with GO 165 and GO 128. This is a five-year inspection cycle. Originally, the AGE cycle only required an external inspection; however, changes in 1999 modified this requirement to include

an internal inspection. The cycle is still named AGE to separate the dead-front equipment data from live-front equipment data.

11.1.4 AGI (Above Ground Live-front, 5-year) – This cycle consists of a detailed external and internal inspection of live-front pad-mounted facilities to identify conditions out of compliance with GO 165 and GO 128. This is a five (5) year inspection cycle.

11.1.5 SUBSURFACE, WITH EQUIPMENT SS3 (Subsurface, three (3) year) – This cycle consists of a detailed inspection of subsurface structures (manholes, vaults, primary hand-holes, and subsurface enclosures) containing distribution equipment. Thus, structures with only cable taps, splices or pass-through are excluded as they are not required by GO 165. The SS3 cycle consists of a detailed inspection of these facilities to identify conditions out of compliance with GO 128. This is a three (3) year inspection cycle.

11.1.6 WOOD POLE INTEGRITY (10/20 year) – These inspections are performed on a 10-year cycle. Each pole is inspected visually, and if conditions warrant, intrusively. Any pole 15 years of age or older is inspected intrusively. The intrusive inspection is normally an excavation around the pole base and/or a sound and bore of the pole at ground line. Treatment is applied at this time in the form of ground line pastes and/or internal pastes. The (ten) 10 year cycle fulfills the requirements of GO 165, which are: (1) all poles over fifteen (15) years of age are intrusively inspected within ten (10) years; and (2) all poles which previously passed intrusive inspection are to be inspected intrusively again on a twenty (20) year cycle.

The wood pole integrity inspections are currently performed by a SoCalGas contractor who also applies wood preservative treatments and installs mechanical reinforcements (C-truss). The type of treatment is dependent upon the age of the pole, the individual inspection history, and the overall condition of the structure.

- If a pole that needs replacement is found on a compliance inspection, SoCalGas' contractor for wood pole integrity inspections may bore into the pole to determine if it needs reinforcement or replacement based on the remaining shell thickness.
- The choice to restore a pole rather than replace the pole is based on the strength of the pole (measured by remaining shell thickness). SoCalGas follows SDG&E's Transmission Engineering and Electric Distribution Standards Specification for Inspection, Treatment and Reinforcement of In-Service Wood Poles (Specification NO.TE-0108 and Specification NO. 337), which specifies the criteria for the rejection of a pole. It also addresses a pole's suitability for C-truss based on the remaining shell thickness for various lengths of pole. If a pole does not have sufficient shell thickness for C-truss, it is rejected and replaced.

11.1.7 PATROL, URBAN (Patrol 1, 1 year) – The purpose of the urban patrol is to identify obvious structural problems and hazards. This cycle consists of a simple-visual inspection of every applicable overhead, aboveground and underground facilities deemed urban area. Under agreement of interpretation with the CPUC, "urban" is defined as incorporated areas (GO 165 defined "urban" as those areas with 1,000 persons or more per square mile). GO 165 defines a "patrol" as "a simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards". When Patrols have been

completed, any identified structural problems and hazards are recorded in SoCalGas tracking system.

11.1.8 PATROL, RURAL (Patrol 2, 2 year) – The purpose of the rural patrol is to identify obvious structural problems and hazards. This cycle consists of a simple visual inspection of every applicable overhead, aboveground and underground. Under agreement of interpretation with the CPUC, "rural" is defined as unincorporated areas (GO 165 defined "rural" as those areas with less than 1,000 persons per square mile). GO 165 defines a "patrol" as a "simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards". When Patrols have been completed, any identified structural problems and hazards are recorded in SoCalGas tracking system. However, SoCalGas performs annual patrols on all its power poles.

11.1.9 POLE BRUSHING AND TREE TRIMMING – Aliso maintains brush and tree clearance around all overhead structures and electrical conductors (as established in GO 95, Rule 35, and the Power Line Fire Prevention Field Guide*) in our system. Brush clearance and tree trimming is done once each year after the winter/spring growing season. Additional tree trimming and pole brush clearance may be done if late-season rain causes regrowth.

Examples of vegetation conditions that are corrected when found during the Detailed Overhead Inspections are:

- Trees/Vegetation in primary (18”) inches or closer.
- Vegetation that causes strain and/or abrasion in secondary or service.
- Climbing space obstructed by vegetation.
- Guy grounded by vegetation.
- Dead, rotten, or diseased trees that may fall and damage overhead conductors or equipment.

Once each year, a survey is conducted to determine exactly which overhead structure need(s) brush clearance and what diameter the brush clearance circle should be. The survey also identifies trees growing close to primary conductors that require trimming according to GO 95, Appendix E – *Clearance of Poles*; Guidelines to Rule 35. At Aliso Canyon, the minimum clearance between vegetation and conductors is four (4) feet at the time of trimming.

11.2 ELECTRICAL OPERATIONS POWER SHUTOFF (GOPS)

To de-energize the overhead power lines at Aliso Canyon Storage Field and implement the Gas Operations Power Shutoff (GOPS) procedure when a red-flag event is declared by the National Weather Service and other criteria are met. Re-energize the overhead power when the GOPS is over.

11.2.1 ADVANCE NOTIFICATION AND PREPARATION – Because GOPS events typically occur with some advance warning, the storage field can rely on the advance notifications, such as e-mails and/or phone call from Storage Risk Management for the GOPS event forecast. This will enable the storage fields to prepare for GOPS events, especially if they are forecasted for the off hours or weekends.

11.2.2 GOPS DECLARATION & CRITERIA – Storage Risk Management will declare a GOPS event given the following criteria:

- Live fuel moisture is less than 75%,
- Dead fuel moisture is less than 10%,
- Relative humidity is less than 20%,
- Red-flag conditions have been declared by weather service for area, and
- Wind speed is:
  - 30 MPH or higher (sustained), or
  - 25 MPH or higher with gusts 55 MPH or higher.

The GOPS event will be declared by Storage Risk Management. The on-duty supervisor, operations management, and environmental management need to be notified immediately.

11.3 ELECTRICAL OVERHEAD DESIGN AND STRENGTH

GO 95 rules 11-19, 20-29, 30-39 and 40-49, specifies requirements for all lines with suitable design and good maintenance, proper grounding, clearances, and strength requirements. SoCalGas lines are designed with proper arrangement and minimum clearances of different class of supply and communication lines. The electrical equipment and structures are designed with sufficient and proper grounding that conforms to the minimum requirements. Climbing space meets the minimum clearances, and overhead structure supports have the minimum specified sectionalizing material and clearances. The minimum clearances are established for vegetation. The design also follows the classification of the line, loading, structure, line crossing, and the required safety factor for the overhead structures and equipment.

11.4 DETAILED OVERHEAD ELECTRICAL

GO 95 rules 50-59, specifies minimum requirements for detailed construction standards for supply lines: class H, L, and T circuits. These requirements include specifications pertaining to the marking and guarding of overhead structures, clearances and sags of conductors and guys, protection against corrosion, cross arm construction, arm hardware, riser construction and termination, climbing and working space, conductor insulators, overhead guys, anchors, and span guys, messengers and insulated cables, enclosed equipment (transformers, capacitors, regulators), and common primary and secondary grounded neutral systems. SoCalGas' overhead distribution electrical structures and facilities are to be constructed in accordance with these requirements.

11.5 DETAILED OVERHEAD COMMUNICATION

GO 95 rules 80-89, specifies minimum requirements for detailed construction standards for class C circuit communication lines. These requirements include specifications pertaining to the inspection, structures, cross arm, hardware, bonding, conductor, cable, and messenger clearances and sags, climbing space, conductor insulators, and guys. SoCalGas' overhead communication structures and facilities are to be constructed in accordance with these requirements.

11.6 JOINT POLES AND LINE CROSSINGS

GO 95 rules 90-94 and 100-105 specifies the minimum requirements for the installation of poles, towers, and structures in joint-use and construction of supply and communication lines in line crossing or conflicts. The requirements for joint use include specifications pertaining to strength, stepping, hardware, marking, interference with fall protection, conductors, cables, messengers, police/fire alarm circuits, vertical runs, risers ground wires and hardware, grounding, climbing space, antennas. The requirements for line crossings include specifications pertaining to pins and conductor fastenings, conductors, prevention of conductor breakage and burning of supports, overhead lightning protection wires, limitation of span lengths, communication wires, crossing or colinear clearances, insulators for supply conductors, screens, and cradles. SoCalGas' joint-use structures and construction of supply and communication lines in line crossings and associated equipment are to be installed in accordance with these requirements.

11.7 UNDERGROUND ELECTRICAL

GO 128 rules 10-19, 20-29, 30-39 specify the minimum requirements for the underground supply line construction for clearances and depths, explosion protection, and guarding of live parts. SoCalGas' underground electric supply lines, underground structures, above ground terminations, clearances, and separation, underground grounding, and bonding, marking, and guarding, pad-mounted, sub-surface, and surface mounted are to be installed in accordance with these requirements.

11.8 UNDERGROUND COMMUNICATION

GO 128 rules 40-46 specifies the minimum requirements for the installation of underground communication lines and equipment. These requirements include specifications pertaining to clearances between duct systems of communication lines, surface distance, risers and above grade terminations, and police, fire alarm and traffic control circuit system design. SoCalGas' underground communication lines and equipment are to be installed in accordance with these requirements.

12 APPENDIX

APPENDIX A
ALISO CANYON EMPLOYEE TRAINING OVERVIEW

STATION TECHNICIAN

Course Title	Description
Station and Storage Operational Duties	Learn the duties of a Station Technician as outlined in the topics below.
Overview of Transmission and Storage Facilities	A complete description of Transmission Facilities, pipeline work, pipeline flow control and measuring stations.
Introduction to Natural Gas	Learn about the properties of natural gas, its chemical make-up, and the type of natural gas we use. Learn where natural gas is found both in and out of the United States and who are our major suppliers of natural gas.
Station Forms, Log Sheets and Logbooks	Become familiar with practices and procedures dealing with identification and completion of appropriate forms used in transmission facilities and operations. Clear records, charts, log sheets and reports are important to station operations.
Portable Gas Detectors	Each employee must be familiar with the equipment and measures employed to prevent and protect against fire in work areas. Learn how to use gas leak detection equipment.
Fire Permits	Learn how to qualify employees in the proper issuance of Company Fire Safety Permits. Learn how to test for contamination of flammable or combustible liquids, gases or vapors and safety precautions to follow before issuing a Fire Safety Permit.
Precision Tools	Learn how to safely use precision tools and the proper use of each. Learn how to care for and maintain these tools.
Slings, Cranes and Lifting Equipment	Learn the appropriate methods in using wire ropes and slings. Learn proper inspection methods for wire ropes and slings before each use, and wire rope or sling selection criteria for a particular application.
Station Piping Color Code	Learn about the contents of these pipes and the colors and codes assigned to these pipes. Colors and codes are used in all transmission facilities.

Course Title	Description
Emergency Shutdown System	Learn about the Emergency Shutdown System and how to use it. Cover testing procedures for the ESD Systems.
Relief Valves	Relief valves are important to the safety of the transmission system and personnel. This lesson will cover the most basic understanding of the purpose of use of relief valves.
Electrical Safety	Learn about electrical safety and how this regulation affects your work at The Gas Company. Learn the rules for working with electrical equipment, use of equipment and safeguards for personal protection.
Electrical Motors	Learn about electric motors, how to remove and install them, and their maintenance requirements.
Hypergun -- Operation and Maintenance	Learn proper methods of lubricating a valve, valve maintenance, maintenance of air-driven and hand-held pressure grease guns.
Valves	Learn about various types of valves and the application for each of these valves. Review the proper procedure for greasing and the care and maintenance of each of them.
Positive Displacement Compressors	Cover the theory, operation, and maintenance of Positive Displacement Compressor. Learn about the operation of compressor valves and the maintenance of various valves.
Compressor Lubrication Systems	Describe the operation and key maintenance issues that affect compressor lubrication.
Compressor Safety Systems	Learn about the various safety systems used in engines and compressors. Learn the importance of knowing what problems activate these safety systems.
Rotary Pumps	Become familiar with the different types of rotary pumps used throughout the transmission facilities.
Grease Truck and Equipment Maintenance	Learn the care and maintenance of grease trucks, and also procedures and safety requirements to follow in conducting a pre-start inspection of a grease truck and the air compressor located on the vehicle.
Portable Gas Generator and Portable Air Blowers	Become familiar with the operation and preventive maintenance of portable gas generators and portable air blowers. Learn troubleshooting skills to identify and correct potential problems.

Course Title	Description
Vacuum Truck	Learn how to safely operate, care for and maintain a vacuum truck. Learn about the hazardous waste manifest and a straight bill of lading that must be completed and carried in the truck any time the truck is on public streets.
Storage and Oil Production Wells	Learn about the major components of oil production and storage field wells as well as related piping and pumper units.
Unibolt	Learn the proper and safe way to isolate and remove a unibolt.
Well Safety Systems	This lesson will cover all components of the surface safety system on all storage wells.
Chokes	Learn about a choke plate's operation and how it affects pressure and temperature at wellheads at Gas facilities.
Storage Tanks	Discuss various types of production and storage tanks used at transmission facilities. Talk about the different methods of taking samples and reading tank levels.
Vessels and Separators	This lesson will cover various types of vessels and separators used to clean natural gas. Learn how to operate and maintain vessels and separators.
Storage Tanks and Three-Way Cut Valves	Learn the proper procedures for taking cuts on different types of tanks. Taking cuts is an important technique to determine what is happening in our stock tanks.
Blanket Gas and Vent Gas Compressors	Learn about blanket gas and vent gas compressors and their operations. Also learn about preventative maintenance procedures for compressors.
Line Strainers	Learn about line strainers, what they are, what they do and how to properly maintain them. Also learn about hydrates are, the conditions that cause a hydrate and what to do about them.
Dump Valves	Learn about dump valves and how they are used in the operation of transmission facilities.
Station Blowing Drips	Discuss the proper procedures to follow for blowing high- and low-pressure gathering line drips in a storage field.
Dehydration Systems	Learn how the dehydration system removes water from the gas. Explain how water is removed through the use of separators traps and dehydration units.

STATION OPERATIONS SPECIALIST

Course Title	Description
Introduction to Station Operations Specialist Duties	An overview of duties for the Station Operations Specialist is presented.
Managing Your Time	Learn how to increase your awareness of critical attitudes and values along with skills that will help you better manage your time. Basic organizational skills can be leaned by anyone, but it does take practicing those skills every day and focusing attention and effort to experience a change in behavior.
Emergency Manual Overview	Learn that the Emergency Plan consists of formal communications documents that have system-wide applications plus written instructions for individual facilities. Learn how to complete a Reporting to Emergency Center form and how to report a bomb threat.
Title V Rules and Regulations	Learn what Title V is and what it means to you and to the Company. Discuss the Clean Air Act.
Gas Standards On-Line Handbook	Learn how to access the Gas Standards that are available on-line through the internet explorer.
Hazardous Communications (SDS)	Learn about the Gas Company's hazardous communication program. Identify terms used on a Material Safety Data Sheet and learn how to obtain an SDS.
Job Safety Analysis	Identify and analyze job safety hazards, how to correct safety hazards, establish a safe performance guide for each job analyzed, and to reduce accidents through prevention.
Proper Use of Fasteners	Identify the proper grades or bolts and nuts to use as fasteners. Define common fastener terminology.
Use and Care of Torque Wrench and Torque Multipliers	Learn how to use a torque wrench, torque wrench extension and a stretch gauge and how to calculate torque value using existing formulas of Actual Mechanical Advantage and the Torque Multiplier.
Use and Care of Slings and Wire Ropes	Learn how to safely select and inspect wire ropes and slings for use. Learn the requirements for inspecting cranes and hoists.

Course Title	Description
Positive Displacement Compressors	Learn the theory, operation and maintenance of Positive Displacement Compressors. Also learn about the operation of compressor valves and the maintenance of the various valves.
Compressor Valve Operation and Maintenance	Learn how compressor valves work and how to recognize and correct valve malfunctions.
Clearance Pockets and Unloaders	Learn the functions of the various types of clearance pockets and unloaders and how to maintain them. Explain the theory and operation of clearance pockets and unloaders.
Compressor Lubrication Systems	Learn how to troubleshoot various lubrication systems.
Compressor Safety Systems	Learn about the various safety systems used in engines and compressors. Learn how to troubleshoot engines and compressor and know what problems activate these safety systems.
Engine Lubrication System	Learn about the lubricating systems used in Gas Company facilities. Also learn how to identify lubrication needs of large industrial engines and the types of lubrication and filter systems used in these engines.
Preventive Maintenance	Learn about the preventative maintenance programs that reduce costs and extend the life of compressor station equipment. Explain Company procedures and what should be checked during a preventative maintenance inspection.
Oil Analysis and Trending	Learn about oil analysis that is conducted to predict engine maintenance needs. Describe the oil analysis tests conducted and interpret the results to predict engine maintenance needs.
Bearings	Learn about the different types of bearings, different design factors and various applications used in engines. Explain the need for bearings and identify the types of bearing required for particular kinds of leads and operating conditions.
Ignition Systems	Learn the fundamentals of how conventional and solid-state ignition systems work and identify the various ignition components for large industrial engines. Learn how to define common ignition problems and troubleshooting techniques.

Course Title	Description
Electric Motors	Learn about electric motors, how to remove and install them and their maintenance requirements. Safely unwire an electrical motor from its power source and remove and install electric motors.
Pumps	Learn about various pumps and their maintenance requirements. Describe the operation and key maintenance requirements of various pumps.
Overview of Underground Storage	The purpose of this course is to provide you with the knowledge and skills necessary for performing wire line surveys. Learn the purpose of an underground gas storage facility, the relationship between gas storage operations and Operation control, the function of an underground gas storage facility, including its relationship to transmission line, the compressor station and gas dehydration plant.
Dehydration Systems	Learn how to trace the gas and triethylene glycol flow on an unlabeled dehydration diagram. Accurately explain the process of how water is removed from gas through the use of separators, traps and dehydration units.
Theory of Regulation	Learn the basic operation of a regulator and the three elements of regulation.
Direct Operated Regulation	Be introduced to spring loaded regulators and their applicators. You will also learn how to inspect, troubleshoot and repair spring-loaded service and monitor regulators.
Introduction to Pressure Regulation	Learn about natural gas pressure and the purpose of the pressure regulator as applied to our residential and most commercial customers.
Introduction to Programmable Logic Controllers	Learn the theory and operation of the PLCs.

STATION MAINTENANCE SPECIALIST

The Station Maintenance Specialist performs higher level skilled technical assignments, independently or as a member of a crew, associated with the maintenance of engines and auxiliary equipment at transmission and underground storage compressor stations. Provides work direction and on the job training.

Course Title	Description
Intro and History of Precision Measurement Tool	The history of measurement tools and an overview of the tools that will be used on the job. You will be able to explain the importance of precision measurement tools.
Use and Care of Calipers	Obtain accurate measurements on various props using a caliper and a 1/64th of an inch graduated scale.
Use and Care of Dial Calipers	Learn how to use and maintain a dial caliper, a precision tool with which you can measure object to within + or - .0005 of an inch.
Use and Care of Thickness Gauges	Learn how to measure small parallel openings with a thickness gauge and record reads to within + or - .001 of an inch accuracy.
Use and Care of Hole and Telescoping Gauges	Review the use of hole gauges and telescoping gauges in measuring vital engine and compressor clearances.
Use and Care of Outside Micrometers	Learn how to use an outside micrometer to measure various compressor engine parts and inside dimensions within an accuracy of + or - .0005 of an inch.
Use and Care of Inside Micrometers	Review how to measure inside dimensions to an accuracy of + of - .0005 inch using an inside micrometer.
Use and Care of Depth Micrometers	Learn how to correctly assemble a depth micrometer, verify calibration and measure various compressor and engine parts with an accuracy of + or - .0005 of an inch.
Use of the Borescope	Learn how to correctly use a Borescope to identify cracks and flaws in equipment. A Borescope can be an ignition source and can never be used to inspect an area where a gas or flammable vapor exists.
Use and Care of a Dial Indicators	Review the use of the dial indicator to detect anomalies in the horizontal plan of the compressor piston rod when performing a compressor rod "run out."
Use and Care of Strain Gauges	Learn how to assemble a strain gauge, selecting the appropriate extension rod for a given crankshaft throw. Learn how to use and maintain strain gauges.
Use and Care of Hand Tools	Learn how to safely use hand tools: taps and dies, easy outs, hand sockets, impact sockets, end wrenches, screwdrivers,

Course Title	Description
	hacksaws, files, hammers, punches, chisels, pliers, tubing cutters, tubing benders.
Use of Care of Slings and Wire Ropes, Cranes and Hoists	Learn how to safely select and inspect wire ropes and slings for use. You will also learn the requirements for inspecting cranes and hoists.
Proper Use of Fasteners	Learn how to recognize quality bolts and nuts necessary for work with compressors and engines.
Use and Care of Torque Wrench, Multipliers and Stretch Gauges	Learn how to use a torque wrench, torque wrench extension and a stretch gauge and how to calculate torque value using existing formulas of Actual Mechanical Advantage and the Torque Multiplier.
Positive Displacement Compressors	Learn the theory, operation and maintenance of positive displacement compressors. Learn about the operation of compressor valves and the maintenance of the various valves.
Compressor Valve Operation and Maintenance	Learn how compressor valves work and how to recognize and correct valve malfunctions.
Clearance Pockets and Unloaders	Learn the function of the various type of clearance pockets and unloaders and how to maintain them. The student will be able to explain the theory and operation of clearance pockets and unloaders.
Compressor Cylinders	Learn the function of compressor cylinders and how to lubricate, cool and maintain them. The student will be able to explain the function of compressor cylinders and the stresses to which they are subjected.
Compressor Cylinder Liners	Learn about the function of cylinder liners in the operation of a compressor.
Compressor Piston Rod Assembly	Learn about the removal and installation of compressor piston rod assemblies. The student will be able to explain how to safely remove and install a compressor piston and a rod assembly and identify components of the compressor piston rod assembly.
Packing, Compressor Rod and Wiper	Learn how to remove and install packing and describe the purpose of packing. You will also learn how to inspect and replace a compressor rod and wiper packing. Explain how to remove and reinstall packing and describe the purpose of

Course Title	Description
	packing. Lap packing cups, measure their depth and fit the proper packing.
Compressor Connecting Rod, Cap and Bearings	Review all safety requirements connected with working inside a crankcase. You will have the opportunity to do a bearing crush and to remove and install bearings on a compressor connecting rod.
Compressor Connecting Rods	Learn how to safely remove and replace compressor connector rods, check for trueness, misalignment and pin-to-busing clearance. Review the use of safety wires and cotter keys.
Compressor Crosshead & Rod Run-Out	Learn about compressor crosshead guides, crosshead and how to perform rod run-out, which is one of the most important measurements taken on a compressor.
Compressor Lubrication Systems	Learn how to troubleshoot various lubrication systems. Describe the operation and key maintenance issues that affect compressor lubrication. Explain how Trabon and McCord compressor lubrication systems function.
Compressor Safety Systems	Learn about the various safety systems used in engines and compressors.
Preventative Maintenance	Learn about preventative maintenance programs that reduce costs and extend the life of compressor station equipment.
Prime Movers	Learn about the various types of prime movers used by The Gas Company. A prime mover is a large industrial gas driven two-cycle or four-cycle engine. Some compressor stations have a gas driven turbine/compressor.
Two Stroke Engines	Learn about two stroke engines, their design and proper balancing techniques.
Four Cycle Engines	Learn about four-cycle engines, their major components, and systems.
Starting Air Systems: Pilot and Non-Pilot	Learn about the various types of starting air systems, their similarities and difference. Describe the operation of these two major starting air systems and troubleshooting skills.
Air Intake Systems	Learn about the intake systems for two and four stroke engines and how to maintain them. Identify the various

Course Title	Description
	types of air intake systems for two- and four-cycle engines and explain the purpose of a charged air system.
Turbochargers, Gear Blowers and Scavenging Pumps	Learn about the function and care and maintenance of turbochargers, gear blowers, and scavenging pumps.
Jacket Water Cooling Systems and Fin Fan Units	Learn the different types of jacket water cooling systems and how to maintain them.
Lubrication System	Learn about the lubricating systems used in Gas Company facilities. Learn how to identify lubrication needs of large industrial engines and the types of lubrication and filter systems used in these engines.
Oil Analysis and Trending	Learn about oil analysis that are conducted to predict engine maintenance needs.
Two Stroke Engine Power Piston, Power Cylinder, Piston Rod and Piston Head Assemblies	Learn the function s of the power piston, power cylinder, piston rod and piston head assemblies in a two-stroke engine.
Four Stroke Engines -- Power Piston, Power Cylinder, Piston Rod and Piston Head Assembly	Describe the functions of the power piston, power cylinder, piston rod and piston head assemblies in a four-stroke engine.
Maintenance of Two and Four-Cycle Power Pistons, Power Cylinders, Connecting Rod and Head Assembly	Learn how to maintain the major components of two and four stroke engines.
Bearings	Learn about the different types of bearings, the different design factors and various applications used in engines.
Bearing Assembly and Bearing Crush	Learn about how to install various types of bearings according to industrial standards and Gas Company procedures.
Main Bearing Bump Check Procedures	Learn the proper procedures for performing a main bearing bump check.
Connecting Rod Bearing Bump Check Procedure	Learn how to perform a connecting rod bearing bump check and to verify bearing clearance in accordance with industrial standards and company procedures.
Piston Wrist Pin Bearing Clearance Procedure	Learn procedures on taking wrist pin clearance measurements.

Course Title	Description
Crankshaft End Trust Clearance Bump Check	Learn about the thrust bearing and how to perform a thrust bearing clearance check.
Engine Frame and Foundation	Learn about the engine frame and foundation.
Flywheel	Learn about the function of the flywheel in engine operation.
Web Deflection Procedures	Learn about web deflection their importance and proper procedures for taking web deflection reads.
Governor Operation and Maintenance	Learn about the operation and maintenance of engine governors.
Basic Electricity	Learn how to identify the methods of generating and measuring electricity. Learn the basic electrical components and terminology.
Alternating and Direct Current	Learn the fundamentals of generating alternating current and direct current and of converting AC to DC.
Electrical Transformers	Learn about electrical transformers, the basic operation and components of an electrical transformer. Explain the functions of basic electrical components within an electrical circuit.
Ignition Systems	Learn the fundamentals of how conventional and solid-state ignition systems work and identify the various ignition components for large industrial engines.
Electrical Motors	Learn about electric motors how to remove and install them and their maintenance requirements.

GAS STORAGE SPECIALIST

Course Title	Description
Station and Storage Operational Duties Database Operation	Learn the duties of a Storage Technician as outlined in the topics below. Learn how to review well pressures in PI.

Course Title	Description
Grease Truck and Equipment Maintenance Daily/Routine Work	Learn procedures and safety requirements to follow in conducting a pre-start inspection of a grease truck and the air compressor located on the vehicle. Complete rounds including daily well inspection. Check in with WSM and review WSM daily report. Coordinate activities required for rig moves.
Portable Gas Generator and Portable Air Blowers Understanding Well Design	Become familiar with the operation and preventive maintenance of portable gas generators and portable air blowers. Learn troubleshooting skills to identify and correct potential problems. Learn how to navigate software and read well and wellbore schematics in Wellview.
Vacuum Truck Wireline Operation	Learn how to safely operate, care for and maintain a Gas Company vacuum truck. Learn about the Hazardous Waste Manifest and a Straight Bill of Lading that must be completed and carried in the truck any time the truck is on public streets. Coordinate wireline work per Storage Field Engineer instruction. Supervise wireline work completed by contractors. Isolate the well for wireline work. Analyze wireline data. Complete the “Remove from Service” form for Operations prior to wireline work.
Storage and Oil Production Wells Chemical Treatment	Learn about the major components of oil production and storage field wells at The Gas Company facilities, as well as related piping and pumper units. Learn how to inspection and repair chemical pumps.
Unibolt Abnormal Operating Conditions	Learn the proper and safe way to isolate and remove a unibolt. Learn how to take the unibolt out of service, changing the API ring and put the unibolt back into service. Learn how to respond to anomalous pressure indications, manage annulus pressures, and respond to pressure deviation alerts.
Well Safety Systems Well Maintenance and Operation	Learn about the surface safety system and the components that make up this safety system. Learn how to troubleshoot this system and make appropriate repairs.

Course Title	Description
	Learn how to complete sand testing and maintain sand test supplies. Learn about pumping unit operations and maintenance. Learn how to troubleshoot ESPs. Learn how to operate gas storage wells. Assist with operations, well unloads, and well kill operations. Learn how to shoot fluid levels. Complete leak repairs. Maintain safety equipment and wellhead/valves. Complete SCSSV testing. Troubleshoot well safety systems. Complete barhole surveys and abandoned well surveys. Complete crystal gauge for well pressures (shut-in).
Chokes Liquid Production	Learn about the operation of a choke and how it affects pressure and temperature at wellheads located in Gas Company facilities. Complete oil cuts, LACT providing, witness tank gauging, witness LACT ticket reconciliation, complete monthly oil inventory, oil seal inspections, gas sampling, oil production well status, complete daily/weekly/monthly reporting, monthly well testing for liquids, flow testing for gas, and corrosion coupon inspection and replacement.
Storage Tanks	Become familiar with the various types of production and storage tanks used throughout The Gas Company transmission facilities. Learn about the different methods of taking samples and reading tank levels.
Vessels and Separators	This module will cover the various types of vessels and separators used to clean natural gas the transmission facilities.
Storage Tanks and Three-Way Cuts	Learn the proper procedures for taking cuts on different types of tanks. Taking cuts is an important technique to determine what is happening in our stock tanks.
Blanket Gas and Vent Gas Compressors	Learn about blanket gas and vent gas compressors and their operations. Also learn about preventative maintenance procedures for the compressors.
Line Strainers	Learn about line strainers, what they are, what they do, and how to properly maintain them. Become familiar with what hydrates are, the conditions that cause a hydrate, and what to do about them.
Dump Valves	Learn about dump valves and how they are used in operation of transmission facilities throughout the company.

Course Title	Description
Station Blowing Drips	Discuss the proper procedures to follow for blowing high- and low-pressure gathering line drips in a storage field.
Dehydration Systems	Learn how to trace the gas and triethylene glycol flow on an unlabeled dehydration diagram. Explain the process of how water is removed from gas through the use of separators, traps and dehydration units.

MEASUREMENT SPECIALIST

The Measurement Specialist course is offered to employees who have little or no field experience. The course covers all aspects of meter and regulator construction, installation, maintenance, calibration, and repair with emphasis on instrumentation used by Transmission.

Course Title	Description
Intro to Gauges	Various types of gauges will be discussed. The employee will learn about the basic operation of gauges and how to read them as well as how to determine if the read on the gauges is within tolerance or out of tolerance per the recommended guidelines.
Basic Regulation	Basic Regulation focuses on the theories of regulation, its components and some common applications in our transmission facilities.
Read and Interpret Detector Tubes	You will learn how to install, read and interpret Detector Tubes. You will learn the basic operation of the Draeger Pump.
Portable Ranarex	Learn about the portable Ranarex and its primary purpose and operation. Also learn about an inverter, how the Ranarex is connected to the inverter, and how the inverter is connected to an auxiliary outlet.
Linear and Non-Linear Charts	Learn how to read and interpret pressure, temperature, and differential charts.
How to Adjust a Spring-Loaded Regulator	The employee will be able to adjust a spring-loaded regulator to a specific pressure setting, explain the operation of regulator, identify the three elements of a regulator and explain the difference between p1 and p2.
Motor Valves and Motor Valve Theory	Learn about and have a basic understanding of pneumatic principles, applications and instrumentation that is used.
Download Electronic Measurement Devices: EC-AT, Mini P&T, TF 6610/11	Introduce how to download data collected from the various facilities into the laptop computer. Mercury EC-AT, Mercury Mini P&T, Totalflow 6610 and Totalflow 6611.
Elements of Regulation and Bypassing	The employee will learn how spring and pilot loaded regulators operate, and learn how to correctly bypass, inspect and troubleshoot regulation devices. Demonstrate how to correctly perform a bypass on a

Course Title	Description
	regulation system and how to perform a regulator inspection.
Relief Valves	Learn the foundation for a progressive understanding of relief valve operation, application, and selection criteria, installation, and maintenance.
Pneumatic/Hydraulic Valves	The employee will learn about pneumatic principles, applications and instrumentation. The employee will be introduced to the essential parts of an operating system, specific instruments and related discrete components used for process flow control, liquid level control and safety systems.
Gas Measurement Systems (Big GEMS)	Big GEMS provide total energy measurement using a Gas chromatograph and a state-of-the-art microprocessor. Also learn about remote terminal unit, smart transmitter calibration, uninterruptable power supply, standard electronic readout, and gas chromatograph.
Gas Chromatograph	Introduced to the theory, operation, maintenance, calibration, and troubleshooting of a gas chromatograph.
Controllers and Controller Concepts	The employee will learn the basic concept of controller action that includes, but is not limited to theory, tuning operation, maintenance and calibration of the Fisher snap action controller, Fisher 4160 series controllers, Fisher 4195 series controllers, concepts of a 3-mode control, and controller tuning. You will learn the basic concept of the Liquid Level Control. You will be introduced to the basic concepts of multi-position valves, pilots and a relay amplifier. This will include maintenance and troubleshooting.
624 ADII Controllers	The student will learn about the Differential Gas Controller (DGC) and the 624 ADII Controller.
Valve Positioners	Learn the basics of valve positioners and actuators, which will include theory, turning, operation, maintenance, and calibration of the Bailey Positioner and Bettis Actuators.

Course Title	Description
Becker Precision Equipment - BOE System	Describe the working principles of the Becker Precision Equipment System and how all the components interact to provide an accurate process variable.
Liquid Level Control	Identify and explain what action must be taken to correct given condition and identify the major components of the liquid level unit. explain the operation and purpose of a Clayton Valve and a Fisher Leveltrol.
Differential Gap Controller	Learn basic concepts of a differential gap controller -- theory, operation, care and maintenance and calibration.
Multi-Position Valves, Pilots and Relays	Introduced to the basic concepts of multi-position valves, pilots and a relay amplifier.
Transmitters and Receivers	Introduced to the transmitters and receivers, which will include application and calibration.
Electrical Safety and Test Equipment	Using a Lab Volt Trainer, training manuals and a Digital Multi-Meter (DMM), you will be taught electrical safety, basic electricity AC and DC.
Electronic Measurement Devices (Little GEMS)	You will learn computer applications for configuring, calibrating, and troubleshooting electronic measurement systems.
Model 5 Meter Prover	Learn basic computer applications such as DOS function, menu driven programs, and how to initiate a program through DOS. Utilizing a laptop and a Model 5 meter prover you will be able to determine Displacement Meter accuracy.
Line Breaks	The employee will be introduced to the reasons for line breaks, where we have line breaks, basic operation of a typical line break and system components, setting up a pressure sensor, and orifice. The student will be able to explain how a line break trips under a given condition.
Well Safety Systems	The employee will be introduced to the reason why we have basic well safety systems and sub-surface safety systems. Your will learn how to install, maintain and troubleshoot a basic well safety system. The student will be able to explain how the B1-2 pilot and quick bleed operate in the manual mode.

INSTRUMENT SPECIALIST

The Instrument Specialist performs high-level skilled work rated to the operation and maintenance of all types of hydraulic, pneumatic, electric, and electronic control instruments and telemetering equipment in the transmission and underground storage system.

Course Title	Description
Instrument Specialist Training Orientation	During this training module, you will learn about various tasks, job duties and responsibilities for your particular job classification. You will develop knowledge and acquire skills that will help you develop your expertise in this classification.
Introduction to Instrument Specialist Position	Instrument Specialist position is the key performer in three important gas transmission work processes: routine installation, monitoring and maintenance of a variety of gas measurement and control instruments; troubleshooting and repair of a variety of gas measurement and control instruments; installation and software/firmware updates for new or updated gas measurement and control instruments.
General Safety Orientation	Review general safety policies included in the Gas Company's Injury and Illness Prevention Program. Also learn general electrical safety procedures to follow when working as an Instrument Specialist.
Introduction to Basic Electricity: Direct Current	This module introduces you to the basics of electricity, including how it is created and the terms used to describe its components. Is this module, you will be experiencing the following: LabVolt experiment -- The Electrical Circuit, lecture on the Fundamentals of Electricity, and practice activity on the Fundamental of Electricity.
Current and Scientific Notation	This module explains how electrons produce an electric current and how to measure current flow. It also introduces how to use very small and very large numbers to measure current and to work with these measures using scientific notation -- a consistent format making them easier to read and interpret.
Voltage and Batteries: Direct Current	This module introduces voltage and batteries, including how to increase voltage and current by connecting batteries in series or parallel. After completing this

Course Title	Description
	module, you should be able to connect cells and batteries in series-parallel combinations and generate a difference in potential using different methods.
Resistance	In this module, you will learn about resistance: the opposition to the flow of current. This module examines the types and characteristics of resistance and the effects of connecting resistors together by a conductor to form a circuit.
Ohm's Law	This module introduces Ohm's Law and how it is applied to a circuit. After completing this module, the student will be able to: identify the three basic parts of a circuit and three types of circuit configurations; describe how current flow can be carried in a circuit; state Ohm's Law with reference to current, voltage, and resistance; solve problems using Ohm's Law for current, resistance, or voltage in series, parallel, and series-parallel circuits; describe how the total flow differs between series and parallel circuits, how the total voltage drop differs between series and parallel circuits, how the total resistance differs between series and parallel circuits; state and apply Kirchhoff's current and voltage laws; verify answers using Ohm's law with Kirchhoff's law; define the symbol for voltage.
Electrical Measurement and Meters	This module introduces common tools used to measure current, voltage and resistance. These include ammeters, voltmeters, ohmmeters and multimeters. The student will have hands-on opportunities to use these devices to make accurate measurements.
Power-Direct Current	This module introduces power and circuit applications involving power. After completing this module, you should be able to calculate power consumption in a variety of gas measurement and control instruments which would then be matched to a correctly sized supply.
DC Circuits	This module introduces the fundamental concepts of DC circuits, including key terms, how they work and how to calculate key values in these circuits. After completing this module, the student will be able to install, monitor and troubleshoot series, parallel and series-parallel

Course Title	Description
	circuits used in gas measurement and control instruments.
Magnetism-Direct Current	This module introduces magnetism, electromagnetism, and the relationship between magnetism and electricity. After completing this module, you should be able to perform the following job task: troubleshoot circuits in a variety of gas measurement and control instruments using the concepts of magnetism and the relationship between magnetism and electricity.
Inductance and Capacitance	This module introduces the concepts, meaning and characteristics of inductance and capacitance. After competing this module, you should be able to identify uses of inductance encountered in gas measurement and control instruments and the uses of capacitance encountered in gas measurement and control instruments.
Introduction of Alternating Current	This module introduces alternating current and how it works. After completing this module, the student will be able to identify applications of AC electricity used in gas transmission instrumentation, the valves applied to an AC signal, and the non-sinusoidal waveforms.
AC Measurement	This module introduces you to the basics of AC measurement including how to measure AC current, voltage, frequency and waveforms. After completing this module, the student will be able to use meters to measure voltage and current in AC circuits, use oscilloscopes to analyze AC circuits, use frequency counters to measure AC frequency and use a function generator for generating exact sinusoidal and non-sinusoidal waveforms.
Resistive AC Circuits-Alternating Current	This module introduces basic AC resistive circuits. After completing this module, the student will be able to solve basic AC resistive circuits, connect resistors in series and parallel in an AC circuit and calculate power in an AC circuit.
Capacitive AC Circuits-Alternating Current	This module introduces basic capacitive AC circuits. After completing this module, you should be able to describe the effects of capacitance on an AC circuit and connect various AC capacitive circuits.

Course Title	Description
Inductive AC Circuits-Alternating Current	This module introduces basic inductive AC circuits. After completing this module, the student will be able to describe the effects of inductance on an AC circuit and connect various AC inductive circuits.
Transformers	This module introduces the basic concepts of transformers, which allow the transfer of an AC signal from one circuit to another. Upon completing this module, the student will be able to draw schematic diagrams of transformers in various circuit applications and solve transformer ratio problems.
Semiconductor Fundamentals	After completing this module, the student will be able to identify uses of semiconductor materials in gas instrumentation.
Diodes	This module introduces diodes and how they work. After competing this module, you should be able to describe the function and characteristics of a junction diode, perform a test on a junction diode to determine if it is operational, describe the function and characteristics of a zener diode, and perform a test on a zener diode to determine if it is operational.
Power Supplies	In this module, the student will be introduced to basic power supplies and uninterruptible power supply (UPS). Power- supplies supply voltage to a variety of circuits. They do this by converting AC to DC through a process called rectification. Power supplies may also use transformers to alter the AC voltage and a voltage regulator to hold the output voltage at a constant level. UPS are back-up systems meant to provide power in the case of an interruption in the electrical service. Solar panels, in conjunction with rechargeable batteries, provide power to electronic devices located in remote areas.

APPENDIX B
GAS REGULATION POLICIES AND REQUIREMENTS

1. ***CALIFORNIA GENERAL ORDER 112-E:***
    i. http://docs.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/126869.htm
2. ***CODE OF FEDERAL REGULATIONS 49 PART 192:***
    ii. http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr192_main_02.tpl

APPENDIX C
SEMI ANNUAL SAFETY INSPECTION CHECKLIST FOR FACILITIES AND GROUNDS

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Location Name: _____ **Date:** _____

2023 Safety Inspection Checklist for Facilities & Grounds

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	*Regulatory Refrences (Cal/OSHA, Cal-Fire Code)*	*Other Sources (ex: Gas Standard)*
0001	2	1.0 Chemical Safety	**Are chemical containers/drums appropriately labeled with product name and physical/health hazards?** **Comments:**		All chemicals/hazardous substances containers and drums must be labeled with product name and physical hazards (i.e., flammable, combustible, oxidizer, etc.) and health hazard (i.e., corrosive, irritant, carcinogen, sensitizer, etc). You can determine the appropriate hazard by reviewing the physical and health sections of the product's SDSs.	Hazard Communication: http://www.dir.ca.gov/Title8/5194.html	Hazard Communication Program SCG 104.05
0002	4	1.0 Chemical Safety	**Are the pesticide contractor completion notices on file for two years?** **Comments:**		Documentation Required: For pesticide, herbicide, or insecticide application, contractor is responsible for providing the facility with a completion notice/receipt (location of property, pesticide applied, date and hour application was completed) and the County Agricultural Commissioner's Office with a usage report. The completion notice should be retained for two years and be available for inspection at the facility. (Title 3, Division 6, Chapter 3, Subchapter 2, Article 1, Section 6619)	California Department of Pesticide Regulation	Pesticide Management SCG 104.0250 Section 1.10.3
0003	4	1.0 Chemical Safety	**When labeled as a Flammable Storage cabinet, is the cabinet fitted with self closing doors, sills and ventilation port?** **Comments:**		If the quantities - Referencing Cal/OSHA 5537, storage in excess of 10 gallons of Class I or II liquids (or 25 aerosol spray cans) combined or 60 gallons of Class IIIA require the use of a storage cabinet. However, not more than 120 gallons of Class I, Class II and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be of Class I and Class II liquid. IF the stored flammable liquids require a flammable storage cabinet, then the cabinet must meet all the requirements of a flammable storage cabinet. These requirements in addition to metal thickness requirements are: Conspicuous label in red letters on contrasting background which reads: FLAMMABLE—KEEP FIRE AWAY; Door shall be self-closing and provided with a three-point lock; Sills; Sealed ventilation port-unless connected to ventilation system. "What amounts require the use of flammable storage cabinets?" Referencing Cal/OSHA 5537, storage in excess of 10 gallons of Class I or II liquids (or 25 aerosol spray cans) combined or 60 gallons of Class IIIA require the use of a storage cabinet. However, not more than 120 gallons of Class I, Class II and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be of Class I and Class II liquid.	http://www.dir.ca.gov/Title8/5533.html	
0004	3	1.0 Chemical Safety	**Are incompatible hazardous materials stored apart with acids separated from bases and both away from flammables?** **Comments:**		Compatible chemicals have similar hazards. Chemicals with similar hazards, if mixed together, produce mild or no reaction. To avoid violent reactions, incompatible chemicals with dissimilar hazards must be stored separately. Refer to the product's SDS to determine hazard and incompatibilities of the product and whether the materials are acidic (ph <7) or basic (ph >7) or have a flash point (below 100 F) indicating that they are "flammable". Under additional tools is a link to guidance tips for proper storage. Please contact your FSA for questions regarding proper storage.	http://www.dir.ca.gov/Title8/5164.html	
0005	3	2.0 Confined Spaces	**Is each Company owned permit required confined space permanently posted with wording "Danger - Permit Required Confined Space?"** **Comments:**		Usually accomplished with a durable sign attached at every entry point. Often the sign is painted next to the entry point.	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0006	4	2.0 Confined Spaces	**Is an updated list of Company owned confined spaces (PRCS and non-PRCS) maintained at the site?** **Comments:**		Each department must keep an updated list of Company owned confined spaces (PRCS and non-PRCS) under its jurisdiction. See Appendix G of SCG166.0077 for example of template form which can be used as part of the inventory to identify these spaces.	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0050	1	2.0 Confined Spaces	**Is air monitoring equipment used at this site calibrated and in good working order?** **Comments:**		Confined spaces atmospheres must be checked with ALTAIR® 5X Multi-Gas Detector calibrated and in good working order (i.e., no error messages). [Visually Inspect gas detectors.]	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0066	4	2.0 Confined Spaces	**Is the annual review of permit required confined space entry operations (including canceled permits) being done?** **Comments:**		Ask question - if applicable to department; if yes then follow up questions are required. Each department is to annually review its Permit Required Confined Space operations (using canceled permits). At a minimum, the department must review all entries during a 12-,onth period. [Confirm completeness of canceled permits, and that Section 8 does not have a check mark on "Serious Hazard Not Eliminated" and Section 9 is detached from the canceled permit. Any deviation must be reviewed with permit issuer. It may be helpful if the local supervisions uses work order systems (i.e. Maximo) to document the steps involved, findings, follow-up actions taken, person performing the annual review and date]	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0092	3	2.0 Confined Spaces	**Have permit required confined space entry permits been completed, posted at entry during use, and kept afterwards for one year?** **Comments:**		For those locations with Permit Required Confined Spaces (PRCS), have SoCalGas PRCS entry permits been completed, posted, and after entry, kept at their department for at least one year? [Visually review a representative sample of issued permits and any existing entry operation.]	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0007	1	3.0 Cylinders (Gas)	**Are all cylinder caps in place when cylinders are transported and stored?** **Comments:**		Cylinders shall be capped when the cylinders are not in use or connected for use. Unless cylinders are secured on a special truck or rack, they shall be capped before being moved.	http://www.dir.ca.gov/title8/4650.html	

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	Regulatory Refrences (Cal/OSHA, Cal-Fire Code)	Other Sources (ex: Gas Standard)
0008	4	3.0 Cylinders (Gas)	**Are cylinders free of corrosion and dents?** **Comments:**		Looking for significant corrosion and not necessarily small rust spots.	http://www.dir.ca.gov/title8/4649.html	
0009	4	3.0 Cylinders (Gas)	**Are cylinders marked with gas content?** **Comments:**		Know the contents of each cylinder in use and storing. Use only vendor label for positive identification of contents. Be aware that color coding may be inconsistent from vendor to vendor. Preferred labeling must be readable and include the identity of the material, statement of hazard and the associated signal word. Cylinders must be stored according to hazard.	http://www.dir.ca.gov/title8/4649.html	
0010	1	3.0 Cylinders (Gas)	**Are oxygen cylinders in storage separated from fuel gas cylinders (e.g. acetylene or hydrogen) or combustible materials (especially oil or grease) a minimum distance of 20 ft. or by a non-combustible barrier either at least 5 ft. high or a minimum of 18 inches above the tallest cylinder, and having a fire-resistance rating of at least 1 hr.?** **Comments:**		Options for storage of oxygen and acetylene or hydrogen cylinders either by a 20 foot distance or a sufficiently high (5 foot or 18 inches above the tallest cylinder) and substantial fire wall (cinder block, concrete, etc). Watch for leaves, trash, and debris accumulation at the bottom of the cylinders. We are also looking for 18 inches of clearance from the edge of the fire wall.	http://www.dir.ca.gov/title8/4650.html	
0011	1	3.0 Cylinders (Gas)	**Are all cylinders securely fastened to prevent damage?** **Comments:**		Gas cylinders shall be secured with a chain or appropriate belt above the midpoint, but below the muster. Specifically looking for a chain since it will not easily degrade in a fire like a rope. Laboratory cylinders less than 18" tall may be secured by approved stands or wall brackets. Cylinders transported or stored in wire transport baskets shall also we secured.	http://www.dir.ca.gov/title8/4650.html	
0012	4	3.0 Cylinders (Gas)	**Are empty cylinders indicated empty with valves closed and protection caps in place?** **Comments:**		Empty cylinders shall be labeled with the word "empty" or the abbreviation "MT" or stored in racks labeled for "empties." Empty cylinders shall be stored away from full cylinders or cylinders in use and must continue to be stored with like hazards.	http://www.dir.ca.gov/title8/4650.html	
0051	1	3.0 Cylinders (Gas)	**Are cylinders transported with the proper dolly or lifting device designed for the purpose?** **Comments:**		Cylinders must be transported using appropriate lifting device designed for that purpose and the cylinders must be secured so that they do not tip, fall, or roll. It is necessary to take precautions so that gas cylinders are not dropped or allowed to strike each other or other objects. Dropping or striking may damage the cylinder valve, which could turn the cylinder into a missile with the potential to destroy property and/or injure personnel.	http://www.dir.ca.gov/title8/4650.html	
0013	1	4.0 Electrical	**Is access to electrical panels clear for 36 inches in front of the panel, as wide as the panel or 30 inches (whichever is greater), and are the doors able to open 90 degrees or greater?** **Comments:**		Electrical panel clearance is required by OSHA and must be maintained for emergency purposes. Clearance must be 36 inches in front of the panel and as wide as the panel or 30 inches whichever is greater. In addition, the doors must be able to open 90 degrees or greater. Looking to allow adequate clearance to open the panel door.	http://www.dir.ca.gov/Title8/2340_16.html	Hazard Communication Program SCG 104.04
0014	4	4.0 Electrical	**Are flexible cords not in permanent use and not run through holes in walls?** **Comments:**		Permanently wired equipment needs conduit housing. Also, flex cords can not be attached to walls, ceilings, etc. and not in place for more than 90 days. We believe that the spirit of the regulation is to prohibit extension cords being used as permanent wiring in lieu of standard building wiring. We interpreted the regulation to include structural walls that would include bearing and non-bearing walls, half walls, divider walls, etc. The regulation doesn't prohibit power strip cords from running through the sides of cabinets to provide power inside of the cabinet. However, the use of extension cords in permanent service is still considered non-compliance.	http://www.dir.ca.gov/Title8/2500_8.html	Cal. Fire Code, Chapter 6, Section 605.5
0015	4	4.0 Electrical	**Are electrical control panel room doors clearly marked with a sign indicating that it is an electrical control panel room?** **Comments:**		Door signs indicating the location of electrical panels assist the quick finding of electrical control panels.	Cal. Fire Code, Chapter 6, Section 605.3.1	
0016	1	4.0 Electrical	**Is the facility free of frayed wires (repaired or removed from service)?** **Comment:**		Live electrical wires need to be enclosed and in good physical condition. Also inspect around junction boxes, etc for the strain relief devices that protect wire coatings.	http://www.dir.ca.gov/Title8/2420_3.html	
0052	3	4.0 Electrical	**Are all 15 and 20 ampere receptacles installed in wet areas, bathrooms and kitchens equipped with GFCI protection?** **Comments:**		All 15- and 20-ampere receptacles installed in wet areas, bathrooms and kitchens must have Ground Fault Circuit Interrupter (GFCI) protection for personnel. The protection may be at the receptacle, connected to another GFCI protected receptacle (up to the limit as prescribed by the Electric Code), or at the circuit breaker.	https://www.dir.ca.gov/Title8/2360_3.html	https://www.dir.ca.gov/dosh/dosh_publications/Electrical_Safety.pdf#:~:text=CAL%2FOSHA%20regulations%20require%20the%20use%20of%20GFCI%27s%20on,part%20of%20the%20permanent%20wiring%20of%20the%20structure
0053	4	4.0 Electrical	**Are cover plates, switches and outlet covers in place and not damaged?** **Comments:**		To eliminate possible shocks, all electrical cover plates, switches, and outlets must not have cracks, missing pieces, etc. Are there places that people can stick their fingers into? This includes cover plates that are found in electrical panel boxes over empty switch openings. Wall receptacles shall be designed and installed so there are no current carrying parts exposed.	http://www.dir.ca.gov/Title8/2510_4.html	

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	*Regulatory Refrences (Cal/OSHA, Cal-Fire Code)*	*Other Sources (ex: Gas Standard)*
054	4	4.0 Electrical	**Are power strips on a single permanent wall plug (i.e., not plugged in series)?** **Comments:**		Power strips must never be in series to make a longer one (It is a violation of the National Electric Code to "daisy chain" power strips). It's best to use one cord in a continuous length from the receptacle to the appliance or tool. Power strips or extension cords are to be used within the limits as labeled/rated by manufacturer.		Cal. Fire Code, Chapter 6. Section 605.5.1
0055	1	4.0 Electrical	**Are phone or electrical wires placed away from foot traffic or properly covered?** **Comments:**		Phone cords and extension cords shall not be run through doorways, holes in ceilings, walls, or floors. Never use staples or nails to attach to baseboards. Use appropriate cord covers to prevent tripping hazards.	Cal. Fire Code Chapter 6, Section 605.1	
0093	1	4.0 Electrical	**Is workspace free of space heaters?** **Comments:**		Space heaters carry a much greater risk of causing a fire than central heating. Space heaters present a greater potential for human error such as leaving them too close to combustible materials or failing to install, operate and maintain them properly. Due to the risk associated with space heaters, they are prohibited from use.	Cal. Fire Code Chapter 6, Section 605.1	
0017	4	5.0 Emergency Action/Fire Plan	**Does the current Emergency Action/Fire Plan exist?** **Comments:**		The emergency action plan shall be in writing and cover those designated actions employers and employees must take to ensure employee safety from fire and other emergencies. Plan of the work area to include team members, posting, accessibility.	https://www.dir.ca.gov/Title8/3220.html	
0018	3	17.0 Eyewash/Shower	**Are eyewashes/shower tested monthly, documented and have dust caps in place?** **Comments:**		Emergency showers and eyewashes must have inspection tags affixed to them indicated that monthly inspections are occurring. There must be sufficient water flow from the eye wash to cause the two water streams to meet at the top of their arc. This flow must exist with the eyewash alone or with the shower activated at the same time (if a shower is present). Covers must be in place regardless whether inside or outdoors.	http://www.dir.ca.gov/Title8/5162.html	
0048	1	17.0 Eyewash/Shower	**Are the smaller plastic eye irrigation bottles within their label expiration date?** **Comments:**		Several facilities have installed eye irrigation bottles as a supplement to existing plumbed or self-contained eye/face wash stations meeting ANSI 385.1-1987 requirements. Although these supplements may not be used in lieu of the required stations, they must be maintained in accordance with the manufacturer's instructions or replacement after their expiration dates. Inspection of these units is for the printed expiration dates.	http://www.dir.ca.gov/Title8/5162.html	
0049	1	17.0 Eyewash/Shower	**Is access to eyewash/shower clear?** **Comments:**		Can you easily get to the eyewash within 10 seconds and without having to climb over or move things?	http://www.dir.ca.gov/Title8/5162.html	
0019	4	6.0 Fire Safety	**Are fire extinguishers inspected and recorded each month at the facility?** **Comments:**		Examine a few extinguishers in the area for their inspection tag indicating dates inspections were performed.	http://www.dir.ca.gov/Title8/6151.html	
0020	4	6.0 Fire Safety	**Is fire equipment (e.g. extinguishers) marked when obstructed from view and readily accessible?** **Comments:**		Portable fire extinguishers must be mounted, located and identified (signage, arrows) so that they are readily accessible to employees without subjecting the employees to possible injury. Monthly inspection must be recorded on the inspection tag which is attached to the fire extinguisher.	http://www.dir.ca.gov/Title8/6151.html	
0021	4	6.0 Fire Safety	**Are sprinklers guarded if they are subject to damage?** **Comments:**		Fire sprinklers heads within chemical/cylinder storage areas must have a guard head to protect from being hit or damaged. A guard head allows water flow while protecting the sprinkler head. Do not attempt to protect the sprinkler by placing a physical block around it which would impedes water flow if the sprinkler is activated.	http://www.dir.ca.gov/title8/6170.html	
0022	4	6.0 Fire Safety	**Are materials stored with a distance greater than 18 inches below the sprinkler heads?** **Comments:**		Sprinkler head clearance is required to ensure that, when activated the water flow is not blocked.	http://www.dir.ca.gov/title8/6170.html	
0023	1	6.0 Fire Safety	**Are ignition sources kept from flammable or combustible materials?** **Comments:**		Typically welding/cutting operations No ignition sources should be permitted in any location where concentrations of flammable gases or vapors may exceed 25% of the lower explosive limit (LEL). For these such areas atmospheric testing is required. Combustible materials should always be kept away from any incompatible substances that could be potential sources of ignition. It is also recommended to keep combustible materials in an area that has appropriate fire resistance.	http://www.dir.ca.gov/Title8/5416.html	
0024	1	6.0 Fire Safety	**Are fire doors unobstructed and operating freely?** **Comments:**		It is important to determine which doors in a facility are considered to be "fire doors" and not propped open. Fire doors ratings are found on the door edge with the hinges.	Cal. Fire Code Chapter 7, 703.2	
0056	2	6.0 Fire Safety	**Are microwaves and toaster ovens away from any combustible items, such as paper towels?** **Comments:**		Combustible materials, such as paper, that can quickly ignite from a hot surface must be stored safely away (at least 2 feet) from microwaves and toaster ovens.	http://www.dir.ca.gov/Title8/5416.html	

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	Regulatory Refrences (Cal/OSHA, Cal-Fire Code)	Other Sources (ex: Gas Standard)
0057	3	6.0 Fire Safety	**Is access to fire hydrants unobstructed and clear of any material for 3 ft. (36 in.) around the hydrants?** **Comments:**		Access to fire hydrants must be keep clear of vehicles parking/blocking hydrant access, storage of equipment or materials, brush, trees, landscaping, weeds, etc. at least 3 ft. (36 inches) around the hydrant.	Cal. Fire Code, Chapter 5, section 507.5.4	
0058	3	7.0 First Aid /CPR/AED/BPP	**Are first aid kits accessible to work area?** **Comments:**		Kits must be mounted or kept in a visible, permanent, and designated location available and known to all employees in the work area	http://www.dir.ca.gov/Title8/3400.html	CPR/AED, Bloodborne Pathogens and First Aid SCG 166.08
0059	3	7.0 First Aid /CPR/AED/BPP	**Have first aid kits been inspected and replenished per included content list?** **Comments:**		Designated first aids kits must be kept fully supplied. Monthly inspections are required to ensure supplies are replenished in a timely manner and available during emergency. Contents of first aid kit must match the list inside the first aid kit. Look for outdated or opened materials.	http://www.dir.ca.gov/Title8/3400.html	IIPP Supervisors Responsibilities Section K
0060	4	7.0 First Aid /CPR/AED/BPP	**Are monthly inspections for AEDs completed and documented in a posting next to the AED unit?** **Comments:**		No additional guidance provided.		
0067	3	8.0 General Working Conditions	**Are building exits clearly marked, illuminated and unobstructed?** **Comments:**		Building exits must remain unlocked and have a clear path to them. Exit signs must be suitably illuminated by a reliable light source and be visible in both normal and emergency lighting modes, with exceptions made for approved self-luminous or electro luminescent signs that provide evenly illuminated letters. Per Cal-OSHA and the state Fire and Building Codes, every required exit sign must be suitably illuminated by a reliable light source (for example, fluorescent) and be visible in both normal and emergency lighting modes, with exceptions made for approved self-luminous or electro luminescent signs that provide evenly illuminated letters. Exit signs do not need to be provided for any room or building having an occupancy of 50 or less.	http://www.dir.ca.gov/Title8/3225.html	
0068	4	8.0 General Working Conditions	**Are pedestrian walkways appropriately maintained with clear traffic signage?** **Comments:**		Permanent aisles, ladders, stairways, and walkways shall be kept reasonably clear and in good repair. Where aisles or walkways may become hazardous, they shall be clearly defined by painted lines, curbing's, or other method of marking.	http://www.dir.ca.gov/title8/3273html; http://www.dir.ca.gov/title8/3272.html	
0069	1	8.0 General Working Conditions	**Are walking and working areas (e.g. carpets and flooring) free of slip and trip hazards including exterior walkways?** **Comments:**		Permanent walkways, and material storage areas shall be maintained free of dangerous depressions, obstructions, anddebris.	http://www.dir.ca.gov/title8/3273.html	
0070	1	8.0 General Working Conditions	**Are ladders in good condition (not splintered, rungs unbroken, anti-slip tread surface, rubber footings)?** **Comments:**		This includes all facility and vehicle mounted ladders (a random sampling of available ladders that are onsite during the assessment/inspection. Ladders will be inspected for cracks, missing rungs, damage or slippery feet/surfaces before each use.	http://www.dir.ca.gov/Title8/3278.html	
0071	2	8.0 General Working Conditions	**When scaffolds are observed to be in use have they been inspected by a competent person?** **Comments:**		If observed in use but not inspected STOP use immediately and LOTO. Scaffolding must be inspected by a competent person to ensure it is in good condition. Some of the things to look for include: (1) Footings must be level, sound, rigid, and capable of supporting the loaded scaffold. (2) Metal components must not be bent, cracked, have holes, rust, welding splatter, pits, broken welds, etc. (3) Wooden planks must not have cracks, splits, mold, separated laminate(s), etc. (4) Guardrails and midrails on platforms must be placed where work is being done.	https://www.dir.ca.gov/title8/1637.html	
0072	1	8.0 General Working Conditions	**When scaffolds are observed not in use is access limited by physical barrier?** **Comments:**		Barriers prevent unauthorized access to a scaffold while the scaffold is incomplete or unattended. This applies to any scaffold from which a person could fall more than 4 feet.	https://www.dir.ca.gov/title8/1637.html	
0073	2	8.0 General Working Conditions	**Is exit door panic hardware operable?** **Comments:**		If panic hardware is present, it must be tested to see if it works. The panic hardware is considered operable if it takes less than 15 pounds of pressure. In other words, it is "easy to use and doesn't take great force to open door using hardware."	https://www.dir.ca.gov/title8/3235.html	
0074	2	8.0 General Working Conditions	**Are floor mats well maintained?** **Comments:**		Mats are used in high traffic areas or where there is a potential for wet floors to protection against slipping. Floor mats should be kept in good condition and be placed in a way as to not create a tripping hazard.	http://www.dir.ca.gov/title8/3272.html	
0075	2	8.0 General Working Conditions	**Are desk, file drawers and cubicle flipper doors kept closed when not in use?** **Comments:**		All common work areas must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	http://www.dir.ca.gov/title8/3272.html	
0076	1	8.0 General Working Conditions	**Are mobile work platform inspected as required by the manufacturer?** **Comments:**		Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the manufacturer's specifications. If the manufacturer is no longer in business and manufacturer's specifications are no longer available, required inspection, maintenance and repairs shall be performed by a qualified person under the direction of a registered professional engineer experienced in the design of elevating work platforms or aerialdevices.	http://www.dir.ca.gov/title8/3640.html	

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	*Regulatory Refrences (Cal/OSHA, Cal-Fire Code)*	*Other Sources (ex: Gas Standard)*
0077	1	8.0 General Working Conditions	**Are employees secured with a restraint or fall protection device while on an aerial lift device?** **Comments:**		Are employees using appropriate personal restraint systems, systems that prevents employee(s) from exiting the handrail system and keeps the employee's feet on the floor of the elevating work platform or aerial lift device.	http://www.dir.ca.gov/title8/3648.html	
0078	1	8.0 General Working Conditions	**Are employees appropriately protected from hazardous walking and working surfaces and while working aloft?** **Comments:**		Protection from falls is provided whenever feasible by engineered controls: guardrails, enclosures, or coverings of openings in floors, roofs, or other equipment. Employees working or walking at elevated work locations and aloft must be protected from falls. 4-feet is the height which requires handrails for existing structures. 7 ½-feet is the height which requires the use of fall protection systems in lieu of handrails in construction.	https://www.dir.ca.gov/title8/1670.html	Fall Protection Plan SCG: 166.02
0079	1	8.0 General Working Conditions	**Is fall protection equipment inspected by a competent person at least twice a year and are inspections documented?** **Comments:**		Documentation Required: Each department with fall protection equipment must have that equipment inspected by trained fall protection Competent Person at least twice a year and inspections documented. Equipment determined to be unsafe must be immediately removed from service.	https://www.dir.ca.gov/title8/1670.html	Fall Protection Plan SCG: 166.02
0080	4	8.0 General Working Conditions	**Are all ceiling tiles present with no openings into the overhead space? (Stained tiles are not considered to be damaged.)** **Comments:**		Ceiling tiles provide a level of fire protection. Ceiling tiles must be in place with no open spacing and in good condition. Ceiling tiles that are moved, cracked, broken, or have holes in them must be replaced.		
0081	3	8.0 General Working Conditions	**Are cubicle areas free of clutter (objects that could cause an employee to trip or fall)?** **Comments:**		All common work areas must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	https://www.dir.ca.gov/title8/3362.html	
0082	2	8.0 General Working Conditions	**Are lobbies, patios, and sidewalks free and clear of debris that could cause trip or slip hazards?** **Comments:**		Permanent roadways, walkways, and material storage areas in yards shall be maintained free of dangerous depressions, obstructions, and debris.	https://www.dir.ca.gov/title8/3362.html	
0083	2	8.0 General Working Conditions	**Are stairways free of debris and repair concerns that could cause trip or slip hazards?** **Comments:**		Stairways shall be free of dangerous projections or obstructions, maintained in good repair, and reasonably free of oil, grease, or water.	https://www.dir.ca.gov/title8/3362.html	
0084	4	8.0 General Working Conditions	**Are computer and equipment rooms clean and orderly?** **Comments:**		All common work areas must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	https://www.dir.ca.gov/title8/3362.html	
0085	4	8.0 General Working Conditions	**Are floors and surfaces maintained free of paint chips?** **Comments:**		This question can be answered "yes" if no paint chips are present on surfaces or if documentation (e.g. lab report, safety data sheet) shows paint or chips contain no lead, arsenic, cadmium, hexavalent chromium and mercury.	https://www.dir.ca.gov/title8/1532_1.html	Lead and Metals in Surface Coatings and Other Sources Hazard Compliance Program SCG 167.30
0086	3	8.0 General Working Conditions	**Are kitchen and lunch areas free and clear of clutter and debris?** **Comments:**		Housekeeping activities ensure that the work environment is safe and clean. Kitchen and lunchroom areas must be maintained to prevent fire hazards, slip, trips, and fall hazards as well as the area must be clean and sanitized for proper food storage.	https://www.dir.ca.gov/title8/3362.html	
0087	3	8.0 General Working Conditions	**Are meeting conference rooms clean and orderly?** **Comments:**		All common work areas must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	https://www.dir.ca.gov/title8/3362.html	
0088	3	8.0 General Working Conditions	**Are restrooms clear of debris and are floors dry?** **Comments:**		All restrooms must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	https://www.dir.ca.gov/title8/3362.html	
0089	3	8.0 General Working Conditions	**Are workstations and countertops clean and orderly, free of sharp objects?** **Comments:**		Housekeeping activities ensure that the work environment is safe and clean. All common work areas must be kept clean and orderly to prevent hazardous conditions of over storage, fire hazards and trip, slip, and fall hazards.	https://www.dir.ca.gov/title8/3362.html	
0025	1	9.0 Machine	**Are all machine controls such as emergency stop buttons identified?** **Comments:**		Each process machine driven by an individual prime mover shall be equipped with a prime mover stopping device which can be safely actuated from the operator's working position.	http://www.dir.ca.gov/Title8/4000.html	

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	Regulatory Refrences (Cal/OSHA, Cal-Fire Code)	Other Sources (ex: Gas Standard)
0026	3	9.0 Machine Safeguards	**Has the hazardous energy control procedure (Lockout/Tagout) been reviewed annually?** **Comments:**		Use the checklist that has been developed to accomplish this task. Annually the responsible person (Site Manager or designee) observes at least one Energy Isolation task and documents that all the steps of the site's procedure were followed. This completed Hazardous Energy Control Isolation checklist is retained at the facility for regulatory or compliance verification. Certification must be retained for one year.	http://www.dir.ca.gov/Title8/3314.html	LocOut/TagOut - Hazardous Energy Control Program SCG: 167.35
0027	3	9.0 Machine Safeguards	**Are machines either bolted to the floor to prevent creeping or sufficiently heavy and rigid so as to prevent dangerous vibration or securely mounted on substantial floors, benches, foundations or other adequate and safe structures?** **Comments:**		Stationary machines shall be sufficiently heavy and rigid so as to prevent dangerous vibration and shall be securely mounted on substantial floors, benches, foundations or other adequate and safe structures.	http://www.dir.ca.gov/Title8/3576.html	
0028	1	9.0 Machine Safeguards	**Are all points of operation including prime movers protected from employee access during machine operation via physical barrier guards?** **Comments:**		Moving machine parts have the potential to cause severe workplace injuries, such as crushed fingers or hands, amputations, burns, or blindness. Safeguards are essential for protecting workers from these preventable injuries. Any machine part, function, or process that may cause injury must be safeguarded.	http://www.dir.ca.gov/Title8/4184html http://www.dir.ca.gov/title8/4310.html	
0029	1	9.0 Machine Safeguards	**Does hand grinder have a guard over 180 degrees of the abrasive wheel?** **Comment:**		Guards to protect the eyes and face protection is required when operating a hand grinder. An angle grinder is a type of hand grinder. Hand grinders should have a guard in place to deflect any flying particles from the operator. The guard is set 180 degrees between the operator and wheel.	https://www.dir.ca.gov/title8/3578.html	
0030	1	9.0 Machine Safeguards	**Are all machine guards in place (e.g. pulleys, belts, points of operation, fans, etc.) and in good condition?** **Comment:**		All guards shall be appropriate for the hazards involved, secured in place, constructed of substantial material and have surfaces free of hazardous projections. This also includes storeroom and garage roll-up doors and drill press pulleys.	http://www.dir.ca.gov/title8/3942.html and http://www.dir.ca.gov/Title8/4070.html	
0090	2	9.0 Machine Safeguards	**Is the abrasive wheel tool rest adjusted to within an 1/8 inch and guard 1/4 inch?** **Comments:**		Work rests shall be kept adjusted closely to the wheel with a maximum opening of 1/8 inch (0.3175 cm) to prevent the work from being jammed between the wheel and the rest, which may cause wheel breakage. The guard shall be adjusted to maximum opening of 1/4 inch.	https://www.dir.ca.gov/title8/3575.html	
0091	2	9.0 Machine Safeguards	**Is an eye and face warning sign near where abrasive wheels are used?** **Comments:**		Eye protection is required when operating an abrasive wheel. Eye protection must be provided and readily accessible to employees who operate an abrasive wheel. Readily accessible is defined as being near the abrasive wheel. Appropriate eye protection signs must be posted. The warning signs are: "Eye and Face Protection Must Be Worn".	http://www.dir.ca.gov/Title8/3340.html	
0031	1	10.0 Personal Protection	**Are respirators bagged and have respirators parts (hoses, face masks, air cylinders etc.) inspected with a record kept for three years?** **Comments:**		All respirators (full face, 1/2-face) shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve. For emergency use respirators, including SCBA shall be inspected monthly and in accordance with manufacturer's recommendations. Inspection records are to remain with case.	http://www.dir.ca.gov/Title8/5144.html	
0032	1	10.0 Personal Protection	**Are onsite di-electric gloves within usage dates, stored in glove bags or suitable containers, and NOT folded?** **Comments:**		Onsite di-electric gloves must be within usage dates, stored in glove bags or suitable containers, and NOT folded.	http://www.dir.ca.gov/Title8/3382.html	
0033	4	11.0 Postings & Records	**Is there a sign posted warning of machines (gate openers, generators, pumps, compressors) starting automatically?** **Comments:**		There shall be conspicuously displayed at all machines driven by electric motors that are controlled by fully automatic starters and which may injure employees, legible signs giving warning that the machines are automatically controlled and may start at any time.	http://www.dir.ca.gov/Title8/3320.html	
0034	4	11.0 Postings & Records	**Are copies of OSHA Forklift Rules posted?** **Comments:**		Documentation should be posted. Forklift rules are posted wherever forklifts are used or dispatched from.	http://www.dir.ca.gov/Title8/3664.html	
0035	4	11.0 Postings & Records	**Are no smoking signs posted for all areas where flammables or combustibles are in use or stored?** **Comments:**		"No Smoking" signs must be posted in areas where flammables and combustibles are used and stored.	http://www.dir.ca.gov/Title8/3340.html	
0046	4	11.0 Postings & Records	**Are copies of Cal/OSHA Article 105 of GISO posted on bulletin boards where hearing conservation is in effect?** **Comments:**		Cal/OSHA requires that a copy of the hearing conservation regulations found in Article 105 be posted on bulletin boards where the hearing conservation program is in effect. This applies to gas operations and electric generation operations and copies of the poster can be obtained from the Safety Department.	http://www.dir.ca.gov/Title8/5099.html	

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0047	4	11.0 Postings & Records	**Is the current year OSHA "all in one" poster and Access to Medical Records poster prominently posted for employees to view that includes emergency telephone numbers?** **Comments:**		The Emergency poster that must be posted must meet the requirements of Cal-OSHA S-500 Form. The copy centers have created a large poster to accommodate all required OSHA postings. Please contact your local copy center or facilities representative.	http://www.dir.ca.gov/wp.asp	
0036	1	12.0 Pressure Vessels	**Are air hoses free of damage that could impair the hose's ability to hold pressure?** **Comments:**		Examine air hoses for damage (cracked or separated outer cover), connectors (tight band clamps and tight fitting quick connects), and the sound of leaking air to ensure that they are able to withstand pressures and service to which they are subjected. If damaged remove form service immediately.	http://www.dir.ca.gov/title8/3300.html	
0037	4	12.0 Pressure Vessels	**Do air tanks with a volume of over 1 1/2 cubic feet or with a safety valve set over 150 psi have an up-to-date Permit to Operate and posted at the vessel?** **Comments:**		Documentation should be posted at vessel: 1. An Air tank having a volume of 1.5 cu ft or less and have a relief valve do not require a permit. 2. An air tank having a volume of 1.5 cu ft to 25 cu ft with safety valve set to open no greater than 150 psi shall be inspected upon start up and given an indefinite permit. 3. Air tanks having a volume of 25 cu ft or greater are subject to inspection every 3 to 5 years whether they are portable or stationary respectively. Permits are posted at the site of the tank. VERIFY THAT THE SERIAL NUMBER OF THE TANK MATCHES THE NUMBER LISTED ON THE PERMIT. Installations with multiple tanks must have a permit for each tank.	http://www.dir.ca.gov/title8/461.html	
0061	4	12.0 Pressure Vessels	**Are CAL/OSHA Permits present for LPG propane storage tanks over 125 gallons, and high pressure boilers over 15 psig steam (natural gas vessels and installations and air brake tanks are not covered.)?** **Comments:**		Permits are required for air tanks, LPG propane storage tanks over 125 gallons, and high pressure boilers over 15 psig steam. Air tanks having a volume of 1 1/2 cubic feet or less which have safety valves set to open at not more than 150 psi do not require permits to operate. Verify with the operating supervision at the location.	http://www.dir.ca.gov/title8/450.html	
0038	1	13.0 Storage and Material Handling	**Is there a safety clip installed and functioning as designed on the crane hook?** **Comments:**		Look at crane hooks and verify these hooks have safety clips installed and functioning as designed. Safety type hooks that prevent the loads from becoming disengaged shall be used.	http://www.dir.ca.gov/Title8/5002.html	
0039	4	13.0 Storage and Material Handling	**Are cranes and hoist routinely inspected?** **Comments:**		Documentation Required: Verify that periodic inspections are conducted at least four times a year. The annual certification, as required by Section 5021(a), can serve as one of the required periodic inspections. The periodic inspections shall be evenly spaced or as close to evenly spaced as scheduling permits through the year. Cranes shall not be operated more than 750 hours, between periodic inspections.	http://www.dir.ca.gov/Title8/5031.html	
0040	3	13.0 Storage and Material Handling	**Are forklifts checked and documented before use daily when used?** **Comments:**		Documentation required: Forklift operators shall inspect the forklift before use on a daily bases. Attention must be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system of the fork lifts (forks, chains, cables, and limit switch). Appropriate inspection forms must be used.	http://www.dir.ca.gov/title8/3664.html	
0041	1	13.0 Storage and Material Handling	**Are slings, chains, ropes, hooks, etc., in good operating condition and synthetic web slings not stored in direct sunlight when not in use?** **Comments:**		Any slings, chains, ropes, hooks, etc. found to be damaged shall be removed from service and properly discarded. Synthetic web slings can be damaged and rendered unsafe after prolonged exposure to direct sunlight. Visual inspections by the operator or other qualified person shall be made of/for: hooks for deformation and cracks, hoist or load attachment chains including end connections for excessive wear, twist, distorted or stretched links interfering with proper function, excessive wear, broken wires, stretch, kinking, or twisting of ropes and rope slings, including end connections. A qualified person shall visually inspect cranes or derrick's controls, rigging and operation mechanism prior to the first operation on any work shift.	http://www.dir.ca.gov/Title8/5031.html and http://www.dir.ca.gov/Title8/5048.html	
0042	2	13.0 Storage and Material Handling	**Does it appear racks are not loaded in excess of their rated capacity and within storage height limits?** **Comments:**		This requirement refers to industrial storage racks (commonly called speed racks) that are used for storage of equipment and parts. These racks must have labels identifying maximum load capacity. Items stored on racks must not exceed rack capacity. A High Pile Permit may be required when storing combustible materials. Contact the Facilities department for more information. High-Piled Combustible Storage: The storage of combustible materials in closely packed piles, on pallets, in racks, or on shelves where the top of storage is greater than 12 feet in height. High-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable and combustible liquids, idle pallets, and similar commodities where the top of storage is greater than 6 feet in height.	http://www.dir.ca.gov/title8/3241.html	
0062	3	13.0 Storage and Material Handling	**Are objects safely stored (on racks, inside cabinets,etc.) not overhanging on storage racks and with heavy or breakable items on lower shelves?** **Comments:**		Objects and materials, wherever stored, shall not create a hazard. They shall be piled, stacked, or racked in a manner designed to prevent tipping, falling, collapsing, rolling or spreading. Materials should not overhand on storage racks (commonly called speed racks).	http://www.dir.ca.gov/title8/3241.html	
0063	4	13.0 Storage and Material Handling	**Are audible warning devices mounted on each overhead traveling or bridge crane equipped with a power traveling mechanism (except pendant controlled)?** **Comments:**		Each overhead traveling or bridge crane equipped with a power traveling mechanism must have an audible warning device with the exception of cranes operated from a pendant control.	http://www.dir.ca.gov/title8/4889.html	
0064	3	14.0 Vehicles	**Are wheel chocks set whenever parking or leaving vehicles with dual rear wheels unattended?** **Comments:**		Company safety standards require that all large and medium size vehicles have wheel chocks in place to prevent the accidental movement of the vehicle.		IIPP Supervisors Responsibilities Section H

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	*Regulatory Refrences (Cal/OSHA, Cal-Fire Code)*	*Other Sources (ex: Gas Standard)*
0043	4	15.0 Welding	**Are friction lighters only used?** **Comments:**		Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.	http://www.dir.ca.gov/title8/4845.html	
0044	2	15.0 Welding	**Are arc welder cables in good condition (no frays or missing insulation)?** **Comments:**		If observed, remove from service, LOTO. Arc welding and cutting cables shall be insulated, flexible and capable of handling the maximum current required bythe operations. Only cable free from repair or splice for 10 feet (3 m) from the electrode holder shall be used unless insulated connectors or splices with insulating quality equal to that of the cable are provided. Electrical tape is not considered a patch.	http://www.dir.ca.gov/title8/4851.html	
0065	1	15.0 Welding	**Are welding gas cylinders turned off when not in use?** **Comments:**		When operations are suspended for any substantial period of time, such as overnight, gas cylinders shall be shut off.	http://www.dir.ca.gov/title8/4845.html	
0045	4	1.0 Chemical Safety	**Is the 3E chemical inventory for your site up to date?** **Comments:**		Review your local chemical inventory and check for new additions and updates sent to Safety. Once in the 3E Online system, follow these steps to obtain a specific inventory list for a particular facility. STEP 1. Visit the SEPA system directly at: https://sepa.sempra.com/ or through the Safety website under "Safety Programs" select "Product Approval" then select "SEPA System". STEP 2. In the SEPA system select the "Visit www.3Eonine.com" button. Note: Log-in credentials for 3E Online will automatically be sent to you. STEP 3: In the 3E online system select the "Report Center" tab near the top of the page, then select "Inventory Reports" STEP 4. In "Section 1: Select Location" on the "Browse" tab find the location for the inventory report you want togenerate. • Click on the "+" sign next to the name to expand. For example select "Sempra Utilities" then SoCalGas, then 1. Site/Workgroup Specific, etc. • Highlight the location for your Facility inventory report. STEP 5. In "Section 2: Select Report" --> "View Inventory List --> "by Product Name with Ingredients" then select the "Run Report" button. STEP 6. Report will be generated. You can export to Excel by selecting the drop down under the "Save" icon at the top of the page. This will provide the inventory list for all products at the location including the sub locations. Products which are approved Companywide can be found under the Companywide location and should be checked as well. Products which are used in the Garages are listed under Fleet Service Catalog. For additional support please contact the SEPA Admin at: sepa@semprautilities.com	Hazard Communication: http://www.dir.ca.gov/Title8/5194.html	Hazard Communication Program SCG 104.05

APPENDIX D

ANNUAL SAFETY INSPECTION CHECKLIST FOR FACILITIES AND GROUNDS

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Location Name:_____ **Date:** _____

2023 ESCMP Safety Self-Assessment Checklist for Facility & Grounds

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	*Regulatory Refrences (Cal/OSHA, Cal-Fire Code)*	*Other Sources (ex: Gas Standard)*
0001	3	1.0 Chemical Safety	**Do employees know how to obtain Safety Data Sheets (SDSs) for the chemicals they work with?** Comments:		Ask a few employees if they know how to obtain an SDS either by our web site or contacting 3E. Note: Office Workers are excluded per training standard.	Hazard Communication: http://www.dir.ca.gov/Title8/5194.html	Hazard Communication Program SCG 104.04
0002	4	1.0 Chemical Safety	**Have chemical products in the work area been approved for company use?** Comments:		Select a random sample of five chemical products in use at the facility by company employees and check them against the company 3E listing. All approved chemical products appear in the 3E system, if it doesn't appear, it is not approved. However, be sure to enter the facility location and the correct name (for example, WD-40, must be entered with the "-", or search on a partial string such as "WD"). Approval for chemical products can be obtained by visiting the Safety Website and requesting approval using the Safety/Environmental Product Approval online request form.		Hazard Communication Program SCG 104.04
0003	2	1.0 Chemical Safety	**Are chemical containers/drums appropriately labeled with product name and physical/health hazards?** Comments:		All chemicals/hazardous substances containers and drums must be labeled with product name and physical hazards (i.e., flammable, combustible, oxidizer, etc.) and health hazard (i.e., corrosive, irritant, carcinogen, sensitizer, etc). You can determine the appropriate hazard by reviewing the physical and health sections of the product's SDSs.	Hazard Communication: http://www.dir.ca.gov/Title8/5194.html	Hazard Communication Program SCG 104.05
0004	4	1.0 Chemical Safety	**If required, are all pipes labeled or color coded with their contents and color code posted?** Comments:		Pipes do not need to be labeled unless they contain hazardous substances and would introduce confusion. Compressed air is not considered a hazardous substance no matter what pressure. A hazard, maybe, but it is not a hazardous substance. Compressed air would have to be reckoned with during any energy isolation/LOTO process due to the pressure. Even piping that contained various hazardous substances may not require labeling if no confusion would exist that would introduce a hazard.	Identification of Piping http://www.dir.ca.gov/Title8/3321.html	Gas Transmission Training - Module 21329 Station Piping Color Codes
0070	4	1.0 Chemical Safety	**Are pesticides stored in locked areas with signs visible from 25 feet?** Comments:		Sign(s) must be visible from any direction of probable approach or any likely way of entrance into the storage area. Sign lettering must be of such size that it is readable from a distance of 25 feet.	California Department of Pesticide Regulation	Pesticide Management SCG 104.0250 Section 1.5.3
0071	4	1.0 Chemical Safety	**Are the pesticide contractor completion notices on file for two years?** Comments:		Documentation Required: For pesticide, herbicide, or insecticide application, contractor is responsible for providing the facility with a completion notice/receipt (location of property, pesticide applied, date and hour application was completed) and the County Agricultural Commissioner's Office with a usage report. The completion notice should be retained for two years and be available for inspection at the facility. (Title 3, Division 6, Chapter 3, Subchapter 2, Article 1, Section 6619)	California Department of Pesticide Regulation	Pesticide Management SCG 104.0250 Section 1.10.3
0072	4	1.0 Chemical Safety	**When labeled as a Flammable Storage cabinet, is the cabinet fitted with self closing doors, sills and ventilation port?** Comments:		If the quantities - Referencing Cal/OSHA 5537, storage in excess of 10 gallons of Class I or II liquids (or 25 aerosol spray cans) combined or 60 gallons of Class IIIA require the use of a storage cabinet. However, not more than 120 gallons of Class I, Class II and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be of Class I and Class II liquid. IF the stored flammable liquids require a flammable storage cabinet, then the cabinet must meet all the requirements of a flammable storage cabinet. These requirements in addition to metal thickness requirements are: Conspicuous label in red letters on contrasting background which reads: FLAMMABLE—KEEP FIRE AWAY; Door shall be self-closing and provided with a three-point lock; Sills; Sealed ventilation port- unless connected to ventilation system. "What amounts require the use of flammable storage cabinets?" Referencing Cal/OSHA 5537, storage in excess of 10 gallons of Class I or II liquids (or 25 aerosol spray cans) combined or 60 gallons of Class IIIA require the use of a storage cabinet. However, not more than 120 gallons of Class I, Class II and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be of Class I and Class II liquid.	http://www.dir.ca.gov/Title8/5533.html	
0073	3	1.0 Chemical Safety	**Are flammables stored in company approved safety containers if out of their original shipping container?** Comments:		Approved containers means that the container is either metal or be NFPA No. 386/Factory Mutual/UL labeled. For containers used to carry gasoline look down in the throat of the spout to verify flame arrestor screen.	http://www.dir.ca.gov/Title8/5417.html and http://www.dir.ca.gov/title8/5577.html	
0074	3	1.0 Chemical Safety	**Are incompatible hazardous materials stored apart with acids separated from bases and both away from flammables?** Comments:		Compatible chemicals have similar hazards. Chemicals with similar hazards, if mixed together, produce mild or no reaction. To avoid violent reactions, incompatible chemicals with dissimilar hazards must be stored separately. Refer to the product's SDS to determine hazard and incompatibilities of the product and whether the materials are acidic (ph <7) or basic (ph >7) or have a flash point (below 100 F) indicating that they are "flammable". Under additional tools is a link to guidance tips for proper storage. Please contact your FSA for questions regarding proper storage.	http://www.dir.ca.gov/Title8/5164.html	
0040	3	2.0 Confined Spaces	**Is each Company owned permit required confined space permanently posted with wording "Danger - Permit Required Confined Space?"** Comments:		Usually accomplished with a durable sign attached at every entry point. Often the sign is painted next to the entry point.	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	Regulatory Refrences (Cal/OSHA, Cal-Fire Code)	Other Sources (ex: Gas Standard)
0041	4	2.0 Confined Spaces	**Is an updated list of Company owned confined spaces (PRCS and non-PRCS) maintained at the site?** Comments:		Each department must keep an updated list of Company owned confined spaces (PRCS and non-PRCS) under its jurisdiction. See Appendix G of SCG166.0077 for example of template form which can be used as part of the inventory to identify these spaces.	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0075	4	2.0 Confined Spaces	**Is the annual review of permit required confined space entry operations (including canceled permits) being done?** Comments:		Ask question - if applicable to department, if yes then follow up questions are required. Each department is to annually review its Permit Required Confined Space operations (using canceled permits). At a minimum, the department must review all entries during a 12-,onth period. [Confirm completeness of canceled permits, and that Section 8 does not have a check mark on "Serious Hazard Not Eliminated" and Section 9 is detached from the canceled permit. Any deviation must be reviewed with permit issuer. It may be helpful if the local supervisions uses work order systems (i.e. Maximo) to document the steps involved, findings, follow-up actions	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0081	3	2.0 Confined Spaces	**Have permit required confined space entry permits been completed, posted at entry during use, and kept afterwards for one year?** Comments:		For those locations with Permit Required Confined Spaces (PRCS), have SoCalGas PRCS entry permits been completed, posted, and after entry, kept at their department for at least one year? [Visually review a representative sample of issued permits and any existing entry operation.]	http://www.dir.ca.gov/title8/5157.html	Confined Space Operations 166.0077
0042	1	3.0 Cylinders (Gas)	**Are all cylinder caps in place when cylinders are transported and stored?** Comments:		Cylinders shall be capped when the cylinders are not in use or connected for use. Unless cylinders are secured on a special truck or rack, they shall be capped before being moved.	http://www.dir.ca.gov/title8/4650.html	
0043	4	3.0 Cylinders (Gas)	**Are cylinders free of corrosion and dents?** Comments:		Looking for significant corrosion and not necessarily small rust spots.	http://www.dir.ca.gov/title8/4649.html	
0044	4	3.0 Cylinders (Gas)	**Are cylinders marked with gas content?** Comments:		Know the contents of each cylinder in use and storing. Use only vendor label for positive identification of contents. Be aware that color coding may be inconsistent from vendor to vendor. Preferred labeling must be readable and include the identity of the material, statement of hazard and the associated signal word. Cylinders must be stored according to hazard.	http://www.dir.ca.gov/title8/4649.html	
0045	4	3.0 Cylinders (Gas)	**Are cylinders protected from heat or physical damage?** Comments:		Looking for high heat applications (not including desert conditions) and not necessarily that they are left outdoors. But they need to be protected from vehicles, machinery, and external heat sources such as flame impingement, intense radiant heat, electric arc, or high temperature steam lines.	http://www.dir.ca.gov/title8/4650.html	Cal. Fire Code, Chapter 5, Section 5303.5.2
0046	1	3.0 Cylinders (Gas)	**Are oxygen cylinders in storage separated from fuel gas cylinders (e.g. acetylene or hydrogen) or combustible materials (especially oil or grease) a minimum distance of 20 ft. or by a non-combustible barrier either at least 5 ft. high or a minimum of 18 inches above the tallest cylinder, and having a fire-resistance rating of at least 1 hr.?** Comments:		Options for storage of oxygen and acetylene or hydrogen cylinders either by a 20 foot distance or a sufficiently high (5 foot or 18 inches above the tallest cylinder) and substantial fire wall (cinder block, concrete, etc). Watch for leaves, trash, and debris accumulation at the bottom of the cylinders. We are also looking for 18 inches of clearance from the edge of the fire wall.	http://www.dir.ca.gov/title8/4650.html	
0047	1	3.0 Cylinders (Gas)	**Are all cylinders securely fastened to prevent damage?** Comments:		Gas cylinders shall be secured with a chain or appropriate belt above the midpoint, but below the muster. Specifically looking for a chain since it will not easily degrade in a fire like a rope. Laboratory cylinders less than 18" tall may be secured by approved stands or wall brackets. Cylinders transported or stored in wire transport baskets shall also we secured.	http://www.dir.ca.gov/title8/4650.html	
0048	4	3.0 Cylinders (Gas)	**Are empty cylinders indicated empty with valves closed and protection caps in place?** Comments:		Empty cylinders shall be labeled with the word "empty" or the abbreviation "MT" or stored in racks labeled for "empties." Empty cylinders shall be stored away from full cylinders or cylinders in use and must continue to be stored with like hazards.	http://www.dir.ca.gov/title8/4650.html	
0049	1	4.0 Electrical	**Is access to electrical panels clear for 36 inches in front of the panel, as wide as the panel or 30 inches (whichever is greater), and are the doors able to open 90 degrees or greater?** Comments:		Electrical panel clearance is required by OSHA and must be maintained for emergency purposes. Clearance must be 36 inches in front of the panel and as wide as the panel or 30 inches whichever is greater. In addition, the doors must be able to open 90 degrees or greater. Looking to allow adequate clearance to open the panel door.	http://www.dir.ca.gov/Title8/2340_16.html	Hazard Communication Program SCG 104.04
0050	4	4.0 Electrical	**Are flexible cords not in permanent use and not run through holes in walls?** Comments:		Permanently wired equipment needs conduit housing. Also, flex cords can not be attached to walls, ceilings, etc. and not in place for more than 90 days. We believe that the spirit of the regulation is to prohibit extension cords being used as permanent wiring in lieu of standard building wiring. We interpreted the regulation to include structural walls that would include bearing and non-bearing walls, half walls, divider walls, etc. The regulation doesn't prohibit power strip cords from running through the sides of cabinets to provide power inside of the cabinet. However, the use of extension cords in permanent service is still considered non-compliance.	http://www.dir.ca.gov/Title8/2500_8.html	Cal. Fire Code, Chapter 6, Section 605.5

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0051	4	4.0 Electrical	**Is the electrical class compliant with the nature of the occupancy?** Comments:		Electric equipment and wiring for all voltages in locations that are classified depending on the properties of the flammable vapors, liquids or gases, or combustible dusts or fibers which may be present. For example, Class I, Division 1 location are locations in which ignitable concentrations of flammable gases or vapors may exist under normal operating conditions (gas compressor stations).	http://www.dir.ca.gov/Title8/2540_1.html	
0052	4	4.0 Electrical	**Are battery charging apparatus well ventilated, protected against physical damage by mobile equipment?** Comments:		This applies to permanently mounted battery charging stations and not to the portable battery chargers typically seen in the garages.	http://www.dir.ca.gov/title8/5185.html	
0053	4	4.0 Electrical	**Are electrical control panel room doors clearly marked with a sign indicating that it is an electrical control panelroom?** Comments:		Door signs indicating the location of electrical panels assist the quick finding of electrical control panels.	Cal. Fire Code, Chapter 6, Section 605.3.1	
0069	4	4.0 Electrical	**Are circuit breakers marked as to the equipment or areas they serve?** Comments:		Typically, markings can be either numeric with respective electrical branching identified, or with text indicating specific locations. ALSO, be alert to unguarded openings in the electrical cabinet. Each space must be covered and typically with a simple plastic snap covering. Electrical tape is not considered an effective barrier.	http://www.dir.ca.gov/Title8/2340_22.html	
0076	1	4.0 Electrical	**Is the facility free of frayed wires (repaired or removed from service)?** Comment:		Live electrical wires need to be enclosed and in good physical condition. Also inspect around junction boxes, etc for the strain relief devices that protect wire coatings.	http://www.dir.ca.gov/Title8/2420_3.html	
0082	1	4.0 Electrical	**Is workspace free of space heaters?** Comments:		Space heaters carry a much greater risk of causing a fire than central heating. Space heaters present a greater potential for human error such as leaving them too close to combustible materials or failing to install, operate and maintain them properly. Due to the risk associated with space heaters, they are prohibited from use.	Cal. Fire Code Chapter 6, Section 605.1	
0054	4	5.0 Emergency Action/Fire Plan	**Does the current Emergency Action/Fire Plan exist?** Comments:		The emergency action plan shall be in writing and cover those designated actions employers and employees must take to ensure employee safety from fire and other emergencies. Plan of the work area to include team members, posting, accessibility.	https://www.dir.ca.gov/Title8/3220.html	
0055	3	17.0 Eyewash/Shower	**Are eyewashes/shower tested monthly, documented and have dust caps in place?** Comments:		Emergency showers and eyewashes must have inspection tags affixed to them indicated that monthly inspections are occurring. There must be sufficient water flow from the eye wash to cause the two water streams to meet at the top of their arc. This flow must exist with the eyewash alone or with the shower activated at the same time (if a shower is present). Covers must be in place regardless whether inside or outdoors.	http://www.dir.ca.gov/Title8/5162.html	
0083	4	6.0 Fire Safety	**Are fire alarms operational to include testing and inspection tags present?** Comments:		Documentation Required: Verify with the Facilities manager at the location regarding ring back tests, etc., Inspection tag may be attached to main pannel.	http://www.dir.ca.gov/Title8/6184.html	
0084	4	6.0 Fire Safety	**Are fire extinguishers inspected and recorded each month at the facility?** Comments:		Examine a few extinguishers in the area for their inspection tag indicating dates inspections were performed.	http://www.dir.ca.gov/Title8/6151.html	
0085	4	6.0 Fire Safety	**Is fire equipment (e.g. extinguishers) marked when obstructed from view and readily accessible?** Comments:		Portable fire extinguishers must be mounted, located and identified (signage, arrows) so that they are readily accessible to employees without subjecting the employees to possible injury. Monthly inspection must be recorded on the inspection tag which is attached to the fire extinguisher.	http://www.dir.ca.gov/Title8/6151.html	
0086	4	6.0 Fire Safety	**Have company fire hydrants been tested annually with the current test report available on site?** Comments:		Private hydrant systems shall be inspected and serviced annually, and the owner shall correct any deficiencies immediately. Hydrants shall be flushed, valves operated and gaskets and caps inspected. Hydrant paint shall be maintained in good condition. The site is in compliance when a current vendor report of the test is provided by the site manager and a copy filed with the local Fire Agency or N/A if no private fire hydrant is on the property.	Cal. Fire Code, Chapter 5, Section 508.5.2	
0087	4	6.0 Fire Safety	**Have fire hoses been inspected within the last 6 months by a designated trained person?** Comments:		Examine air hoses for damage (cracked or separated outer cover), connectors (tight band clamps and tight fitting quick connects), and the sound of leaking air to ensure that they are able to withstand pressures and service to which they are subjected. If damaged remove form service immediately.	http://www.dir.ca.gov/title8/6165.html	

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0088	4	6.0 Fire Safety	**Are sprinklers guarded if they are subject to damage?** Comments:		Fire sprinklers heads within chemical/cylinder storage areas must have a guard head to protect from being hit or damaged. A guard head allows water flow while protecting the sprinkler head. Do not attempt to protect the sprinkler by placing a physical block around it which would impedes water flow if the sprinkler is activated.	http://www.dir.ca.gov/title8/6170.html	
0089	4	6.0 Fire Safety	**Are sprinklers unpainted and uncovered to allow for immediate actuation in a fire?** Comments:		Sprinkles shall be free from excess debris and paint covering to allow for the sprinklers to automatically start on their own when a fire starts.	http://www.dir.ca.gov/title8/6170.html	
0090	4	6.0 Fire Safety	**Are materials stored with a distance greater than 18 inches below the sprinkler heads?** Comments:		Sprinkler head clearance is required to ensure that, when activated the water flow is not blocked.	http://www.dir.ca.gov/title8/6170.html	
0091	1	6.0 Fire Safety	**Are ignition sources kept from flammable or combustible materials?** Comments:		Typically welding/cutting operations No ignition sources should be permitted in any location where concentrations of flammable gases or vapors may exceed 25% of the lower explosive limit (LEL). For these such areas atmospheric testing is required. Combustible materials should always be kept away from any incompatible substances that could be potential sources of ignition. It is also recommended to keep combustible materials in an area that has appropriate fire resistance.	http://www.dir.ca.gov/Title8/5416.html	
0092	1	6.0 Fire Safety	**Are fire doors unobstructed and operating freely?** Comments:		It is important to determine which doors in a facility are considered to be "fire doors" and not propped open. Fire doors ratings are found on the door edge with the hinges.	Cal. Fire Code Chapter 7, 703.2	
0093	4	6.0 Fire Safety	**Is the fixed fire aqueous film-forming foam system checked every month and annually by certified vendor?** Comments:		Documentation Required: Verify with the Facilities manager at the location. Company employees conduct external monthly inspections on all portable foam generator fire extinguishing systems to verify the unit components, hoses and nozzles are in good condition. A State-certified contract maintenance company knowledgeable in the design and function of fixed systems inspect them annually to assure the system, including AFFF foam chemical analysis, is maintained and in good operating condition.		Fire Prevention and Protection - Transmission and Storage SCG: 106.0063
056	3	7.0 First Aid /CPR/AED/BPP	**Are names of designated AED rescuers posted at the AED units in their work area?** Comments:		Designated individuals who have been AED trained must have their names posted at the AED units in their work area.		CPR/AED, Bloodborne Pathogens and First Aid SCG: 166.08
0057	3	8.0 General Working Conditions	**Are building exits clearly marked, illuminated and unobstructed?** Comments:		Building exits must remain unlocked and have a clear path to them. Exit signs must be suitably illuminated by a reliable light source and be visible in both normal and emergency lighting modes, with exceptions made for approved self-luminous or electro luminescent signs that provide evenly illuminated letters. Per Cal-OSHA and the state Fire and Building Codes, every required exit sign must be suitably illuminated by a reliable light source (for example, fluorescent) and be visible in both normal and emergency lighting modes, with exceptions made for approved self-luminous or electro luminescent signs that provide evenly illuminated letters. Exit signs do not need to be provided for any room or building having an occupancy of 50 or less.	http://www.dir.ca.gov/Title8/3225.html	
0058	2	8.0 General Working Conditions	**Are all hot (enough to cause skin damage) surfaces covered or located 7 feet above work areas?** Comments:		Typical with emergency power generators. Requires covering pipes and other exposed surfaces with thermal insulating material or otherwise guard them when they have an external surface temperature of 140°F (60°C) or higher and are within seven feet vertically from the floor or 15 inches horizontally from stairways, ramps or fixed ladders.	http://www.dir.ca.gov/title8/3308.html	
0059	4	8.0 General Working Conditions	**Are light bulbs guarded if they are subject to damage?** Comments:		In locations where electric equipment (e.g.: light bulbs) is likely to be exposed to physical damage guards shall be arranged to prevent such damage.	https://www.dir.ca.gov/Title8/2340_17.html	
0060	2	8.0 General Working Conditions	**When scaffolds are observed to be in use have they been inspected by a competent person?** Comments:		**If observed in use but not inspected STOP use immediately and LOTO.** Scaffolding must be inspected by a competent person to ensure it is in good condition. Some of the things to look for include: (1) Footings must be level, sound, rigid, and capable of supporting the loaded scaffold. (2) Metal components must not be bent, cracked, have holes, rust, welding splatter, pits, broken welds, etc. (3) Wooden planks must not have cracks, splits, mold, separated laminate(s), etc. (4) Guardrails and midrails on platforms must be placed where work is being done.	https://www.dir.ca.gov/title8/1637.html	
0061	2	8.0 General Working Conditions	**Are elevated locations at company facilities where employees regularly work (roof tops, mezzanines, etc.) provided with protection from falls (e.g. Guardrails)?** Comments:		Guardrails shall be provided on all open sides of unenclosed elevated work locations, such as: roof openings, open and glazed sides of landings, balconies or porches, platforms, runways, ramps, or working levels more than 30 inches above the floor, ground, or other working areas of a building. Where overhead clearance prohibits installation of a 42-inch guardrail, a lower rail or rails shall be installed. The railing shall be provided with a toeboard where the platform, runway, or ramp is 6 feet or more above places where employees normally work or pass and the lack of a toeboard could create a hazard from falling tools, material, or equipment.	http://www.dir.ca.gov/title8/3210.html	

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0062	1	8.0 General Working Conditions	**Are service pits guarded when not in use?** Comments:		Typically seen at garage locations with chain/pole guarding around the pits.	http://www.dir.ca.gov/title8/3213.html	
0063	4	8.0 General Working Conditions	**Are industrial truck aisles 2 ft. wider than the single truck or 3 ft. wider than two vehicles?** Comments:		Where industrial vehicles are in customary use, traffic aisles designed for the passage of a single vehicle shall be at least 2 feet wider than the widest vehicle. Two-way traffic aisles shall be at least 3 feet wider than twice the width of the widest vehicle. The Division will permit the use of suitable turnouts adjacent to one-way traffic aisles for two-way traffic when the use of such turnouts will provide equivalent safety.	http://www.dir.ca.gov/title8/3272.html	
0064	4	8.0 General Working Conditions	**Does each mobile platform have a name plate containing the manufacturer and capacity?** Comments:		Each aerial device or elevating work platform shall have a conspicuously displayed legible plate or other legible marking verifying the aerial device or elevating work platform is designed and manufactured in accordance with applicable specifications.	http://www.dir.ca.gov/title8/3638.html	
0065	1	8.0 General Working Conditions	**Are mobile work platform inspected as required by the manufacturer?** Comments:		Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the manufacturer's specifications. If the manufacturer is no longer in business and manufacturer's specifications are no longer available, required inspection, maintenance and repairs shall be performed by a qualified person under the direction of a registered professional engineer experienced in the design of elevating work platforms or aerial devices.	http://www.dir.ca.gov/title8/3640.html	
0066	1	8.0 General Working Conditions	**Are employees secured with a restraint or fall protection device while on an aerial lift device?** Comments:		Are employees using appropriate personal restraint systems, systems that prevents employee(s) from exiting the handrail system and keeps the employee's feet on the floor of the elevating work platform or aerial lift device.	http://www.dir.ca.gov/title8/3648.html	
0067	1	8.0 General Working Conditions	**Are employees appropriately protected from hazardous walking and working surfaces and while working aloft?** Comments:		Protection from falls is provided whenever feasible by engineered controls: guardrails, enclosures, or coverings of openings in floors, roofs, or other equipment. Employees working or walking at elevated work locations and aloft must be protected from falls. 4-feet is the height which requires handrails for existing structures. 7 ½-feet is the height which requires the use of fall protection systems in lieu of handrails in construction.	https://www.dir.ca.gov/title8/1670.html	Fall Protection Plan SCG: 166.02
0068	1	8.0 General Working Conditions	**Is fall protection equipment inspected by a competent person at least twice a year and are inspections documented?** Comments:		Documentation Required: Each department with fall protection equipment must have that equipment inspected by trained fall protection Competent Person at least twice a year and inspections documented. Equipment determined to be unsafe must be immediately removed from service.	https://www.dir.ca.gov/title8/1670.html	Fall Protection Plan SCG: 166.02
0094	1	8.0 General Working Conditions	**When scaffolds are observed not in use is access limited by physical barrier?** Comments:		Barriers prevent unauthorized access to a scaffold while the scaffold is incomplete or unattended. This applies to any scaffold from which a person could fall more than 4 feet.	https://www.dir.ca.gov/title8/1637.html/	
0005	1	9.0 Machine Safeguards	**Are all machine controls such as emergency stop buttons identified?** Comments:		Each process machine driven by an individual prime mover shall be equipped with a prime mover stopping device which can be safely actuated from the operator's working position.	http://www.dir.ca.gov/Title8/4000.html	
0006	1	9.0 Machine Safeguards	**Does an EQUIPMENT and/or PROCESS SPECIFIC written hazardous energy control procedure (LockOut/TagOut) exist when employees are cleaning, repairing, servicing or adjusting prime movers, machinery or equipment?** Comments:		Ask for binder or documentation at machine. (1) Equipment-specific hazardous energy control procedures need only be prepared when employees are performing service or maintenance work on the equipment; (2) Operations must clearly document this just-in-time procedure compliance approach to ensure the employees/supervisors responsible for performing service or maintenance work clearly understand what is expected of them; (3) Best practices for specific operations hazardous energy control situations could be prepared in advance (for example: in a common reference binder) for the typical and routine maintenance and repair work. Best practices and/or checklists using customized formats for use in Operations need to address all types of hazardous energy sources found in the appendix of the company standard (i.e. electrical, mechanical, hydraulic, natural gas, pneumatic, heat, chemical, and water). Furthermore, supervisors, or their designees, and qualified persons can signoff hazardous energy procedures to accommodate shift staffing levels. Retention of a copy of the most recent completed hazardous energy procedures is required to provide guidance to future procedures and evaluation of the program effectiveness.	http://www.dir.ca.gov/Title8/3314.html	LocOut/TagOut - Hazardous Energy Control Program SCG: 167.35
0007	3	9.0 Machine Safeguards	**Has the hazardous energy control procedure (Lockout/Tagout) been reviewed annually?** Comments:		Use the checklist that has been developed to accomplish this task. Annually the responsible person (Site Manager or designee) observes at least one Energy Isolation task and documents that all the steps of the site's procedure were followed. This completed Hazardous Energy Control Isolation checklist is retained at the facility for regulatory or compliance verification. Certification must be retained for one year.	http://www.dir.ca.gov/Title8/3314.html	LocOut/TagOut - Hazardous Energy Control Program SCG: 167.35

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0008	3	9.0 Machine Safeguards	**Are machines either bolted to the floor to prevent creeping or sufficiently heavy and rigid so as to prevent dangerous vibration or securely mounted on substantial floors, benches, foundations or other adequate and safe structures?** Comments:		Stationary machines shall be sufficiently heavy and rigid so as to prevent dangerous vibration and shall be securely mounted on substantial floors, benches, foundations or other adequate and safe structures.	http://www.dir.ca.gov/Title8/3576.html	
0009	1	9.0 Machine Safeguards	**Are all points of operation including prime movers protected from employee access during machine operation via physical barrier guards?** Comments:		Moving machine parts have the potential to cause severe workplace injuries, such as crushed fingers or hands, amputations, burns, or blindness. Safeguards are essential for protecting workers from these preventable injuries. Any machine part, function, or process that may cause injury must be safeguarded.	http://www.dir.ca.gov/Title8/4184.html http://www.dir.ca.gov/title8/4310.html	
0010	1	9.0 Machine Safeguards	**Does hand grinder have a guard over 180 degrees of the abrasive wheel?** Comment:		Guards to protect the eyes and face protection is required when operating a hand grinder. An angle grinder is a type of hand grinder. Hand grinders should have a guard in place to deflect any flying particles from the operator. The guard is set 180 degrees between the operator and wheel.	https://www.dir.ca.gov/title8/3578.html	
0011	1	9.0 Machine Safeguards	**Are all machine guards in place (e.g. pulleys, belts, points of operation, fans, etc.) and in good condition?** Comment:		All guards shall be appropriate for the hazards involved, secured in place, constructed of substantial material and have surfaces free of hazardous projections. This also includes storeroom and garage roll-up doors and drill press pulleys.	http://www.dir.ca.gov/title8/3942.html and http://www.dir.ca.gov/Title8/4070.html	
0012	1	9.0 Machine Safeguards	**Can the operator promptly disconnect the power to machinery in case of emergency?** Comments:		All machines shall be equipped with adequate means for the operator of the machine to disconnect the power promptly in case of an emergency. **(Ex: E-stop and cords within arms reach)**	http://www.dir.ca.gov/title8/4001.html	
0013	1	9.0 Machine Safeguards	**Is the operation of a machine prevented from accidental actuation?** Comments:		Machine power controls shall be maintained in safe operating condition and shall be so designed, installed and/or located so that they cannot operate due to accidental contact with objects or parts of the body.	http://www.dir.ca.gov/title8/4000.html	
0077	2	9.0 Machine Safeguards	**Is the abrasive wheel tool rest adjusted to within an 1/8 inch and guard 1/4 inch?** Comments:		Work rests shall be kept adjusted closely to the wheel with a maximum opening of 1/8 inch (0.3175 cm) to prevent the work from being jammed between the wheel and the rest, which may cause wheel breakage. The guard shall be adjusted to maximum opening of 1/4 inch.	https://www.dir.ca.gov/title8/3575.html	
0078	2	9.0 Machine Safeguards	**Is an eye and face warning sign near where abrasive wheels are used?** Comments:		Eye protection is required when operating an abrasive wheel. Eye protection must be provided and readily accessible to employees who operate an abrasive wheel. Readily accessible is defined as being near the abrasive wheel. Appropriate eye protection signs must be posted. The warning signs are: "Eye and Face Protection Must Be Worn".	http://www.dir.ca.gov/Title8/3340.html	
0014	1	10.0 Personal Protection	**Are respirators bagged and have respirators parts (hoses, face masks, air cylinders etc.) inspected with a record kept for three years?** Comments:		All respirators (full face, 1/2-face) shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve. For emergency use respirators, including SCBA shall be inspected monthly and in accordance with manufacturer's recommendations. Inspection records are to remain with case.	http://www.dir.ca.gov/Title8/5144.html	
0095	1	9.0 Machine Safeguards	**Do mechanical or hydraulic powered press brakes incorporate safeguards that restrict the operator's entrance (physical guard), inhibit machine operations (interlocking or presence sensors), or automatically withdraw operator's hands (pull-back restrains) during machine operation? (Note: This requirement does not pertain to manually operated press breaks)** Comments:		A press brake is a machine used to bend sheet metal products and must have guards to keep hands out of the point of operation.	http://www.dir.ca.gov/title8/4214.html	
0015	1	10.0 Personal Protection	**Are respirator metal cylinders hydrotested every five years or composite air cylinders hydrotested every three years?** Comments:		Documentation Required: Look for documentation of hydrotesting of cylinders that are used in SCBA gear. Verify type of cylinder in kits and confirm hydrotesting timeframe. Hydrotesting date or expiration date is stamped on cylinder. **Verify if composit cylinders are in use. Take note.**	http://www.dir.ca.gov/Title8/5144.html http://www.dir.ca.gov/title8/2940_6.html	Respirator Protection Program SCG 104.04, Self-Contained Breathing Apparatus SCBA Equipment Operating and Maintenance Procedures SCG 104.0193

Question # in SIMS:	Priority Scale	Category Classification	Question:	Yes, No, NA	Guidance:	Regulatory Refrences (Cal/OSHA, Cal-Fire Code)	Other Sources (ex: Gas Standard)
0016	3	10.0 Personal Protection	**Are certificates of breathing air quality available at the site for breathing air in cylinders/tanks?** Comments:		Documentation required and may be posted. The breathing air documents that would be acceptable contain: a. Current date (within a year); b. Clearly identifies the vendor; c. States exactly what they are certifying-breathing air and has those parameters listed or referenced; and finally, d. Identifies a person from the vendor/lab who is making the claim	http://www.dir.ca.gov/Title8/5144.html	
0017	1	10.0 Personal Protection	**Are onsite di-electric gloves within usage dates, stored in glove bags or suitable containers, and NOT folded?** Comments:		Onsite di-electric gloves must be within usage dates, stored in glove bags or suitable containers, and NOT folded.	http://www.dir.ca.gov/Title8/3382.html	
0018	4	11.0 Postings & Records	**Is there a sign posted warning of machines (gate openers, generators, pumps, compressors) starting automatically?** Comments:		There shall be conspicuously displayed at all machines driven by electric motors that are controlled by fully automatic starters and which may injure employees, legible signs giving warning that the machines are automatically controlled and may start at any time.	http://www.dir.ca.gov/Title8/3320.html	
0019	4	11.0 Postings & Records	**Are copies of OSHA Forklift Rules posted?** Comments:		Documentation should be posted. Forklift rules are posted wherever forklifts are used or dispatched from.	http://www.dir.ca.gov/Title8/3664.html	
0020	4	11.0 Postings & Records	**Are no smoking signs posted for all areas where flammables or combustibles are in use or stored?** Comments:		"No Smoking" signs must be posted in areas where flammables and combustibles are used and stored.	http://www.dir.ca.gov/Title8/3340.html	
0021	1	12.0 Pressure Vessels	**Are air hoses free of damage that could impair the hose's ability to hold pressure?** Comments:		Examine air hoses for damage (cracked or separated outer cover), connectors (tight band clamps and tight fitting quick connects), and the sound of leaking air to ensure that they are able to withstand pressures and service to which they are subjected. If damaged remove form service immediately.	http://www.dir.ca.gov/title8/3300.html	
0022	4	12.0 Pressure Vessels	**Do air tanks with a volume of over 1 1/2 cubic feet or with a safety valve set over 150 psi have an up-to-date Permit to Operate and posted at the vessel?** Comments:		Documentation should be posted at vessel: 1. An Air tank having a volume of 1.5 cu ft or less and have a relief valve do not require a permit. 2. An air tank having a volume of 1.5 cu ft to 25 cu ft with safety valve set to open no greater than 150 psi shall be inspected upon start up and given an indefinite permit. 3. Air tanks having a volume of 25 cu ft or greater are subject to inspection every 3 to 5 years whether they are portable or stationary respectively. Permits are posted at the site of the tank. VERIFY THAT THE SERIAL NUMBER OF THE TANK MATCHES THE NUMBER LISTED ON THE PERMIT. Installations with multiple tanks must have a permit for each tank.	http://www.dir.ca.gov/title8/461.html	
0023	4	13.0 Storage and Material Handling	**Are crane controls identified for each movement?** Comments:		All electrically operated cranes shall have their controllers plainly marked to indicate their function and the equipment they control.	http://www.dir.ca.gov/Title8/4896.html	
0024	1	13.0 Storage and Material Handling	**Is there a safety clip installed and functioning as designed on the crane hook?** Comments:		Look at crane hooks and verify these hooks have safety clips installed and functioning as designed. Safety type hooks that prevent the loads from becoming disengaged shall be used.	http://www.dir.ca.gov/Title8/5002.html	
0025	4	13.0 Storage and Material Handling	**Does the operator know if the load weights are within the capacity of the lifting device?** Comments:		The qualified person (rigger/operator) shall be trained and capable of safely performing the rigging operation. All loads shall be rigged by a qualified person (rigger/operator) or by a trainee under the direct visual supervision of a qualified person (rigge/operator).	http://www.dir.ca.gov/Title8/4999.html	
0026	4	13.0 Storage and Material Handling	**Are cranes and hoist routinely inspected?** Comments:		Documentation Required: Verify that periodic inspections are conducted at least four times a year. The annual certification, as required by Section 5021(a), can serve as one of the required periodic inspections. The periodic inspections shall be evenly spaced or as close to evenly spaced as scheduling permits through the year. Cranes shall not be operated more than 750 hours, between periodic inspections.	http://www.dir.ca.gov/Title8/5031.html	

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0027	3	13.0 Storage and Material Handling	**Is the crane load chart clearly visible?** Comments:		The maximum rated load of all cranes shall be plainly marked on each side of the crane, and clearly legible from the ground or floor.	http://www.dir.ca.gov/Title8/4907.html	
0028	2	13.0 Storage and Material Handling	**Is there a sign you can see from 12 ft. that reads "Unlawful To Operate Cranes Qithin whitin 10 ft. of High-Voltage Lines of 50,000 Volts or Less"?** Comments:		The owner, agent, or employer responsible for the operations of equipment shall post and maintain in plain view of the operator and driver on each crane, derrick, power shovel, drilling rig, hay loader, hay stacker, pile driver, or similar apparatus, a durable warning sign legible at 12 feet reading: "Unlawful To Operate This Equipment Within 10 Feet Of High-Voltage Lines of 50,000 Volts Or Less." In addition to the above wording, the following statement in small lettering shall be provided on the warning sign: "For Minimum Clearances of High-Voltage Lines In Excess of 50,000 Volts, See California Code of Regulations, Title 8, Article 37, High-Voltage Electrical Safety Orders."	http://www.dir.ca.gov/Title8/2947.html	
0029	3	13.0 Storage and Material Handling	**Are forklifts checked and documented before use daily when used?** Comments:		Documentation required: Forklift operators shall inspect the forklift before use on a daily bases. Attention must be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system of the fork lifts (forks, chains, cables, and limit switch). Appropriate inspection forms must be used.	http://www.dir.ca.gov/title8/3664.html	
0030	1	13.0 Storage and Material Handling	**Are slings, chains, ropes, hooks, etc., in good operating condition and synthetic web slings not stored in direct sunlight when not in use?** Comments:		Any slings, chains, ropes, hooks, etc. found to be damaged shall be removed from service and properly discarded. Synthetic web slings can be damaged and rendered unsafe after prolonged exposure to direct sunlight. Visual inspections by the operator or other qualified person shall be made of/for: hooks for deformation and cracks, hoist or load attachment chains including end connections for excessive wear, twist, distorted or stretched links interfering with proper function, excessive wear, broken wires, stretch, kinking, or twisting of ropes and rope slings, including end connections. A qualified person shall visually inspect cranes or derrick's controls, rigging and operation mechanism prior to the first operation on any work shift.	http://www.dir.ca.gov/Title8/5031.html and http://www.dir.ca.gov/Title8/5048.html	
0031	4	13.0 Storage and Material Handling	**Are all balcony and loft storage locations in good condition with load capacity identified?** Comments:		We are requiring a load limit sign with the intent of this ESCMP assessment question going back to:§3241. Live Loads. (a) The live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed shall have such design live loads conspicuously posted by the owner in that part of each story in which they apply, using durable metal signs, and it shall be unlawful to remove or deface such notices. The occupant of the building shall be responsible for keeping the actual load below the allowable limits.	http://www.dir.ca.gov/Title8/3241.html	
0032	2	13.0 Storage and Material Handling	**Does it appear racks are not loaded in excess of their rated capacity and within storage height limits?** Comments:		This requirement refers to industrial storage racks (commonly called speed racks) that are used for storage of equipment and parts. These racks must have labels identifying maximum load capacity. Items stored on racks must not exceed rack capacity. A High Pile Permit may be required when storing combustible materials. Contact the Facilities department for more information. High-Piled Combustible Storage: The storage of combustible materials in closely packed piles, on pallets, in racks, or on shelves where the top of storage is greater than 12 feet in height. High-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable and combustible liquids, idle pallets, and similar commodities where the top of storage is greater than 6 feet in height.	http://www.dir.ca.gov/title8/3241.html	
0079	3	13.0 Storage and Material Handling	**Is the rated load capacity plainly marked on lift equipment including forklifts and slings?** Comments:		All lift equipment is required to be marked with its rated load capacity. In particular, Gas Standard 100.0155 stipulates that rope slings shall be marked or coded to show the rated capacities and shall not be used with loads in excess of their rated capacities. Synthetic web slings shall be marked or coded to show the rated capacities for each type of hitch and type of synthetic web material. Finally, that wire rope multiple leg bridle slings shall have a permanent affixed durable identification marked with the wire rope size, number of legs, rated load and reach. (See Standard 100.0155 for marking examples).	http://www.dir.ca.gov/title8/sb7g13a101.html	
0096	5	13.0 Storage and Material Handling	**Are all cranes and hoists with a lifting capacity greater than three tons inspected at least four times a year with one of the inspections conducted by a currently licensed certifying agency?** Comments:		Documentation Required: Verify with the operating supervision at the location.	http://www.dir.ca.gov/Title8/5021.html	
0080	4	14.0 Vehicles	**Were the required NGV annual inspections completed within the last 12 months?** Comments:		Documentation Required: ask for NGV annual inspection for stations inside company sites. Verify inspection is within the last 12 months.		

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0033	4	15.0 Welding	**Is a hot work program in place and being followed?** Comments:		Ask question if applicable, if "yes" follow up questions and documentation is required. Verify with the operating supervision at the location. Review completed Hot Work permits of the last 12 months.	http://www.dir.ca.gov/title8/4848.html	Hot Work Permit Program SCG:167.15
0034	4	15.0 Welding	**Are stationary welding machines grounded?** Comments:		If stationary welding machine is present, ensure the grounding is either through a third wire in the cable containing the circuit conductor or through a separate wire at the source of the current.	http://www.dir.ca.gov/title8/4851.html	
0035	4	15.0 Welding	**Are electrodes removed from holders when not in use and electric power off when unattended?** Comments:		For unattended welding equipment is power off and electrodes removed from holders and placed to prevent employee injury.	http://www.dir.ca.gov/title8/4851.html	
0036	2	15.0 Welding	**Are arc welder cables in good condition (no frays or missing insulation)?** Comments:		**If observed, remove from service, LOTO.** Arc welding and cutting cables shall be insulated, flexible and capable of handling the maximum current required by the operations. Only cable free from repair or splice for 10 feet (3 m) from the electrode holder shall be used unless insulated connectors or splices with insulating quality equal to that of the cable are provided. Electrical tape is not considered a patch.	http://www.dir.ca.gov/title8/4851.html	
0037	4	16.0 Laboratory Safety	**Have the lab hood/ventilation systems been tested after initial installation, alterations, or maintenance, and at least annually?** Comments:		Documentation Required: Verify with the operating supervision at the location.	http://www.dir.ca.gov/Title8/5154_1.html	
0038	4	16.0 Laboratory Safety	**Are the lab hood air velocity gauges installed and functioning?** Comments:		Hoods shall be equipped with a quantitative airflow monitor that continuously indicates whether air is flowing into the exhaust system during operation. The quantitative airflow monitor shall measure either the exact rate of inward airflow or the relative amount of inward airflow. Examples of acceptable devices that measure the relative amount of inward airflow include: diaphragm pressure gauges, inclined manometers, and vane gauges.	http://www.dir.ca.gov/Title8/5154_1.html	
0039	4	16.0 Laboratory Safety	**Has the Chemical Hygiene Plan been reviewed annually and updated if necessary?** Comments:		Ask question if applicable, if "yes" then follow up questions are required. Verify with the operating supervision at the location.	http://www.dir.ca.gov/Title8/5191.html	

APPENDIX E
GAS STORAGE O&M POLICIES AND PROCEDURES:

Number	Document Title	Published On
104.08	Silica Dust Exposure Control Plan	2022-07-01
107.0287	GMI Gasurveyor – Combustible Gas Indicator (CGI)	2019-04-01
107.0322	Impacto Bar Maintenance Procedures	2022-03-18
107.0331	Radiodetection RD8100 Locator	2022-09-01
167.0231	Corrosion Monitoring	2022-10-05
167.0233	Corrosion Coupon Removal	2022-11-01
223.0032	Incident Evaluation Process on Gas Systems	2022-10-01
223.0103	Aerial Leakage Surveys	2023-02-01
224.101	Storage Well Design	2022-10-01
224.102	Drilling Storage Wells	2023-01-01
224.103	Well Workover	2023-09-01
224.104	Well Isolation	2023-09-01
224.105	Coiled Tubing	2023-09-01
224.106	Well Integrity Inspection	2022-12-01
224.107	Blowout Contingency Plan	2023-09-01
224.108	Well Record Keeping	2023-09-01
224.109	Abnormal Operating Conditions – Underground Storage	2022-10-01
224.110	Wellsite Security and Safety	2023-01-01
224.111	Training – Storage Wells and Reservoir	2023-07-01
224.112	Emergency Preparedness and Response Effectiveness – Storage Wells and Reservoirs	2021-07-01
224.113	Gas Sampling – Underground Storage	2023-01-01
224.114	Geological and Engineering Design	2023-07-18
224.115	Inspection of Third Party Wells	2023-07-28
224.117	Start-Up and Commissioning – Storage Wells and Reservoirs	2023-01-01
224.118	Plugged Well Inspections	2022-12-01
SIMP.6	Management of Change	2023-01-01
SIMP.A	Terms, Definitions and Acronyms	2022-07-06
100.0152	Self Audit Requirements – Gas Measurement (Distribution, Transmission & Storage)	2018-12-11
100.0154	Cranes and Hoist Operation & Maintenance	2022-09-01
100.0155	Wire Rope / Synthetic Web Sling / Wire Rope Multiple Bridle Sling / Hook Maintenance and Use	2021-02-01
104.0001	Environmental Training	2023-09-06
104.0002	Environmental Self-Assessments	2022-11-01
104.02	Notification Requirements for Release/Spill Events	2022-04-27
104.04	Hazard Communication Program	2019-03-25
104.05	Asbestos Management	2022-10-27
104.06	Respiratory Protection Program	2023-04-01
104.07	Hydrogen Sulfide Hazard Compliance Program	2019-10-07
104.0017	Pipeline Liquids – Field Handling	2019-01-03

Number	Document Title	Published On
104.0030	Hazardous Waste Shipping	2019-11-05
104.0040	Hazardous Material Shipping	2019-01-17
104.0042	PCB Guidance for Pipeline Abandonment or Removal	2023-09-13
104.0070	Field Sampling Guidelines for PCBs	2022-12-16
104.073	State Stormwater Construction General Permit	2023-08-31
104.075	Facility Storm Water Management Plans and Best Management Practices for Compliance with Municipal Storm Water Requirements	2022-01-27
104.077	Dewatering Gas Utility Vaults and Underground Structures	2023-04-17
104.079	Section 404 Federal Clean Water Act and Section 10 Rivers/Harbors Act Compliance	2022-01-27
104.085	Hazardous Material / Waste Management	2022-08-11
104.0090	Hydrogen Sulfide (H2S) Management	2020-05-01
104.0100	Air Quality Compliance and Permits	2022-10-31
104.0115	Air District Equipment Breakdown Reporting	2022-10-14
104.0150	Proposition 65 Compliance	2020-09-17
104.0160	Underground Storage Tanks & Inspection of Gasoline Fueling Stations	2020-06-02
104.0195	MST Air Purification Systems (Blue Air Panel)	2020-10-01
104.0196	Self-Contained Stand-By Kit for Airline Respirator	2022-06-21
104.0200	Industrial Storm Water Pollution Prevention – Statewide General Industrial Storm Water Permit	2021-07-22
104.0210	Industrial Waste Discharge to Sanitary Sewer	2019-04-05
104.0225	Water Quality Certifications for Construction Projects	2020-08-18
104.0250	Pesticide Management	2020-04-01
106.0019	Land and Right of Way Encroachments	2022-12-10
106.0063	Fire Extinguishing Equipment	2019-12-09
107.0002	Tool & Material (T&M) Committee Roles and Responsibilities and Procedure for Requesting T&M Evaluations	2021-09-01
107.0004	Material Evaluation and Implementation	2021-10-14
107.0155	Gas Extraction Suit – Laundering Requirements	2022-12-05
107.0275	Cordless Drill	2020-04-30
107.0276	Reciprocating Saw Operating Procedures	2019-02-27
107.0284	ALTAIR 5X MULTI-GAS DETECTOR UNIT	2020-03-05
107.0293	RMLD – Remote Methane Leak Detector	2019-01-01
107.0294	DP-IR Heath Detecto Pak-Infrared	2019-04-01
107.0310	Approved Measurement Standards – Use, Maintenance and Calibration	2023-02-01
107.0345	Cylinders – Controlling and Handling	2023-06-01
107.0350	CNG Cylinder/Cylinder Pod – Filling	2022-02-10
107.0390	Meters/Measurement Equipment – Handling, Storing and Shipping	2019-08-30
107.0500	Air Tank Inspection Procedure	2020-08-10
140.0130	Energy Diversion Mitigation – Region and Field Employee Responsibilities and Instructions	2022-02-01
142.0610	Advanced Meter	2021-12-01
151.0010	Environmental Inspections, Search Warrants, and Internal Notifications	2022-10-01
166.04	Hearing Conservation Program	2020-04-01
166.0015	Fire Prevention and Protection – Transmission and Storage	2021-04-01

Number	Document Title	Published On
166.0020	Grounding and Bonding Flammable Liquid Containers	2021-02-02
166.0025	Prevention of Accidental Ignition of Natural Gas	2023-08-18
166.0032	Low-Voltage Electrical Safety Program	2022-05-01
166.0034	ARC FLASH Safety Program	2022-03-01
166.0076	Working in Flammable Atmosphere	2022-01-01
166.0077	Confined Space Operations	2021-06-22
166.0080	Traffic Control and Vehicle Placement	2022-05-01
166.0082	Public Right-of-Way Construction Enforcement Program	2019-04-01
166.0095	Unfriendly Incidents	2023-07-01
167.15	Hot Work Permit Program	2021-08/24
167.30	Lead and Metals in Surface Coatings: Hazard Compliance Program	2021-02-01
167.33	Safety Inspections and Self Assessments	2022-05-25
167.35	Hazardous Energy Control Program	2022-07-01
167.0100	Operator Qualification Program	2023-04-01
167.0200	Data Gathering and Integration	2020-10-29
167.0211	Bellhole Inspection Requirements	2020-12-22
167.0212	Casing Wax Fill	2021-05-25
167.0216	Stress Corrosion Cracking Direct Assessment Procedure	2023-07-11
167.0229	Internal Corrosion Management Plan	2020-05-04
167.0230	Internal Corrosion Design and Construction Considerations	2021-02-26
167.0232	Field Sampling and Analysis of Liquids and Solids/Sludge	2022-11-21
167.0235	Immediate Repair Conditions – Transmission Pipelines	2022-09-15
167.0240	Assessment of Pipeline Integrity Using Guided Wave UT	2020-11-01
167.0245	Global Positioning System (GPS) Process	2020-05-01
167.0247	Aboveground Survey Plan	2023-09-15
167.0248	Alternating Current Attenuation Survey	2018-09-26
167.0249	Close Interval Survey	2023-09-15
167.0252	Inspection of Cased Pipe	2021-06-23
167.0253	Surveys of As-Built Records for Construction of High Pressure Pipelines and Pipeline Facilities	2023-04-01
167.0254	Storage Field Line Identification and Records	2021-02-01
180.0001	Material Usage and Selection	2023-07-05
180.0005	Steel Pipe – Selection Requirements	2023-06-01
180.005	Steel Pipe Yield, Design Properties and Design Pressure Tables	2020-10-01
180.0010	Steel Butt-Weld Fittings – Selection Guide	2023-06-01
180.0015	Wedding Bands, Reinforcing Sleeves and Canopies – Selection Guide	2023-02-01
180.0020	Flanges – Selection, Torque, and Installation Requirements	2023-02-01
180.0025	Bolting – Selection Guide	2020-11-01
180.0030	Branch Connection, Steel – Selection Guide	2022-06-01
180.0035	Leak Repair Clamps and Sleeves – Selection Guide	2023-03-29
180.0040	Pressure Control Fittings – Selection Guide	2022-07-01
180.0085	Valve Usage and Selection Guide	2021-07-27
180.0090	Valve Casing Assembly – Selection Guide	2021-03-01
180.0105	Tubing Selection Guide	2019-02-01
182.005	Service Pipe and Excess Flow Valve Sizing	2023-03-01

Number	Document Title	Published On
182.0010	Request for Pipeline Design Assistance	2020-12-01
182.0015	Lowering in Place – Existing Steel Pipelines	2020-10-09
182.0020	Electrical Facilities in Hazardous Areas	2020-09-01
182.0021	Inspection and Maintenance of SoCalGas Electrical Distribution Equipment	2020-11-17
182.0032	Blowdown Time, Sizing, and Volume Calculations	2023-04-01
182.0040	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure	2021-03-02
182.0049	Liquid Penetrant Examination API 1104	2020-04-07
182.050	Nitrogen Requirements	2021-06-01
182.0051	Magnetic Particle Examination API 1104	2020-04-07
182.0055	Identification of Steel Pipe and Butt Weld Fittings	2021-10-01
182.0056	Documentation Traceability of Pipeline Materials	2022-04-26
182.0070	Angles and Bends in Steel Piping	2023-04-01
182.0080	Casing Assemblies – Steel Carrier Pipe	2021-05-06
182.0085	Pipe End Closures	2021-08-12
182.0093	Wear Pads and Bands for Steel Gas Piping	2020-07-01
182.0095	Piping Spans – Unsupported	2021-11-01
182.0115	Company Facility Design: Hazardous Energy Source Isolation for Company Equipment and Systems	2019-03-27
182.0155	Gas Loss Estimation – Pipeline	2023-07-01
182.0160	Purging Pipelines and Components	2023-06-02
182.0165	Tap Requirements	2022-11-01
182.0170	Strength Testing – High Pressure Pipelines and Facilities	2023-03-29
182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping	2023-05-30
182.0190	Class Location – Determination and Changes	2022-10-01
182.0200	Design Factors for Steel Piping Systems	2020-11-01
183.05	Message Center Reporting (MCR)	2023-09-01
183.06	Reports of Safety-Related Pipeline Conditions	2023-02-27
183.07	Pipeline Incident Reports to CPUC and PHSMA; National Transportation Safety Board (NTSB) Accident Investigation	2021-12-01
183.08	Pipeline Safety Reports and Notifications to CPUC and PHSMA	2023-04-01
183.09	Reporting Requirements for CPUC Citations and Self-reported Possible Violations	2019-07-01
182.0021	Inspection and Maintenance of SoCalGas Electrical Distribution Equipment	2020-11-17
182.0032	Blowdown Time, Sizing, and Volume Calculations	2023-04-01
182.0040	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure	2021-03-02
182.0049	Liquid Penetrant Examination API 1104	2020-04-07
182.050	Nitrogen Requirements	2021-06-01
182.0051	Magnetic Particle Examination API 1104	2020-04-07
182.0055	Identification of Steel Pipe and Butt Weld Fittings	2021-10-01
182.0056	Documentation Traceability of Pipeline Materials	2022-04-26
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182.0080	Casing Assemblies – Steel Carrier Pipe	2021-05-06
182.0085	Pipe End Closures	2021-08-12
182.0093	Wear Pads and Bands for Steel Gas Piping	2020-07-01
182.0095	Piping Spans – Unsupported	2021-11-01
182.0115	Company Facility Design: Hazardous Energy Source Isolation for Company Equipment and Systems	2019-03-27
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182.0165	Tap Requirements	2022-11-01
182.0170	Strength Testing – High Pressure Pipelines and Facilities	2023-03-29
182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping	2023-05-30
182.0190	Class Location – Determination and Changes	2022-10-01
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183.05	Message Center Reporting (MCR)	2023-09-01
183.06	Reports of Safety-Related Pipeline Conditions	2023-02-27
183.07	Pipeline Incident Reports to CPUC and PHSMA; National Transportation Safety Board (NTSB) Accident Investigation	2021-12-01
183.08	Pipeline Safety Reports and Notifications to CPUC and PHSMA	2023-04-01
183.09	Reporting Requirements for CPUC Citations and Self-reported Possible Violations	2019-07-01
183.0030	Contact with Fire and Police Departments and Public Agencies	2020-03-01
183.0110	Field Procedure – Emergency Incidents Transmission	2022-10-01
183.0112	Gas Transmission Management Off Hour On-Call Procedures	2022-10-01
184.0002	Site Restoration Specifications	2023-04-01
183.0112	Gas Transmission Management Off Hour On-Call Procedures	2022-10-01
184.0002	Site Restoration Specifications	2023-04-01
184.06	Gas-Handling and Pressure Control	2023-08-01
184.09	Prevention of Excavation Damage to Company Facilities	2023-06-01
184.011	Notification of Excavation and Construction Activities – Assembly Bill Number 1937/ PUC Code 955.5	2022-02-01
184.12	Inspection of Pipelines on Bridges and Spans	2021-05-01
184.016	W-K-M Valve Maintenance	2022-11-01
184.0175	Prevention of Damage to Subsurface Installations	2023-04-01
184.0200	Underground Service Alert and Temporary Marking	2023-06-01
184.0245	Leak Investigation – Distribution	2020-08-01
184.0285	Lubricate Plug Valves	2022-07-01
184.0290	Flushing Plug Valves	2023-09-01
184.0590	Pressure Control Qualification Requirements	2023-03-01
185.0305	MSA Inspection and Maintenance General Requirements	2023-03-01
184.0590	Pressure Control Qualification Requirements	2023-03-01
185.0305	MSA Inspection and Maintenance General Requirements	2023-03-01
185.0310	Measurement and Regulation Equipment; Inspection Schedule – Medium & Large Customer Meter Set Assemblies (MSA'S)	2023-03-01
185.0342	Investigate Measurement and Regulation Problems – Medium, Large, and Above Standard Pressures MSAs	2018-11-19

Number	Document Title	Published On
185.0344	Mitsubishi Uninterruptible Power Supply	2019-10-30
185.0345	Meters – Field Accuracy Testing	2023-09-01
185.0346	Establishing a Valid Meter Proof Check Test for Electronic Correctors	2023-09-01
185.0425	Rotary Meters – Installation, Field Maintenance, Inspection and Repair	2022-02-15
185.0346	Establishing a Valid Meter Proof Check Test for Electronic Correctors	2023-09-01
185.0425	Rotary Meters – Installation, Field Maintenance, Inspection and Repair	2022-02-15
185.0449	SICK MAIHAK FS600 Ultrasonic Meter – Operation and Maintenance	2022-05-31
185.0451	Instromet Ultrasonic Meters – Operation and Maintenance	2022-02-10
185.0452	Daniel Ultrasonic Meter – Operation and Maintenance	2022-02-15
185.0455	Flow Measuring Devices – Field Maintenance	2019-12-01
185.0457	Totalflow Inspection and Calibration Requirements for 6610, 6413, 6713 & X-Series	2019-09-26
185.0458	Totalflow Inspection and Calibration Requirements for 6611, 6414, 6714 & X-Series	2019-09-27
185.0459	Mercury Electronic Corrector – Installation and Maintenance Requirements	2021-08-01
185.0466	Mercury Electronic Recorder and ERX – Installing, Inspecting and Calibration	2023-09-01
185.0473	OMNI 6000 – Field and Maintenance Procedures	2019-05-24
185.0475	Orifice Meters and Orifice Plates – Field Inspection and Maintenance	2019-04-09
185.0515	Temperature Devices – Maintenance	2022-03-01
185.0517	Transmitters – Field Calibration	2019-10-29
185.0530	Turbine Meters – Operation and Maintenance	2023-09-01
185.0555	Regulator Performance Tests	2023-08-07
186.0002	Design and Application of Cathodic Protection	2022-01-01
186.02	Cathodic Protection – Inspection of Exposed Pipe	2020-12-01
186.0005	Cathodic Protection – Mixed Piping System	2021-05-01
186.005	Cathodic Protection – Instruments and Testing Equipment	2021-12-22
186.006	Selection and Installation of Rectifiers and Impressed Current Anodes	2020-07-01
186.06	Cathodic Protection – Electrical Isolation	2020-07-01
186.09	Cathodic Protection – Casings	2021-12-03
186.0035	Criteria for Cathodic Protection	2023-07-24
186.0036	10mV Polarization Criteria	2023-06-01
186.0040	Magnesium Anodes for Corrosion Control	2020-06-01
186.0052	Copper Sulfate Electrode	2019-12-16
186.0075	Electrical Test Stations & Bond Assembly	2020-02-26
186.0090	Corrosion Control of Underground Hazardous Substance Storage Tanks	2021-01-06
186.0100	Approved Protective Coatings for Below Ground Corrosion Control	2021-12-01
186.0102	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating	2021-11-01
186.0103	External Surface Preparation and Field Applied Coatings for Buried Pipelines	2021-06-22
186.0104	Surface Preparation and Coating for Above Ground Piping and Steel Components	2022-01-01

Number	Document Title	Published On
186.0108	External Surface Preparation and Coating Application for Steel Tanks and Vessels (New & Refurbished)	2021-02-01
186.0109	Internal Coating of Tanks, Vessels, & Drip Legs	2021-06-28
186.0110	Field Tape Wrapping requirements	2021-10-01
186.0111	Field Application of Grease Coating	2021-06-23
186.0117	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas	2021-06-01
186.0120	Interference – Stray Electrical Current	2023-03-08
186.0135	Operation and Maintenance of Cathodic Protection Facilities	2021-09-01
186.0170	Record Keeping – Corrosion Control	2021-12-03
186.0180	Cathodic Protection Test Orders – Monitoring Isolated Facilities	2022-03-01
186.0190	Induced High Voltage Alternating Current (HVAC) on Pipelines	2018-12-04
187.0050	Cutting Into Gas Mains, MSAs and Abandoned Substructures – Safety Precautions	2021-07-29
187.0055	General Welding Requirements	2022-09-01
187.0056	Welding Field Guide	2021-08-26
187.0103	Purging Pipelines Using Air Movers For Cold Tie Operations	2021-05-18
187.0170	Connect Copper Wire To Steel Pipe – Pin Brazing, Thermite Welding and Braze Welding Processes	2022-12-01
187.0175	Inspection and Testing of Welds on Company Steel Piping	2020-12-01
187.0180	Qualification and RE-Qualification of Welders	2023-05-10
187.0200	Radiographic Examination API 1104	2020-08-01
188.0001	Standard Specification for Natural and Substitute Fuel Gases	2023-05-01
188.01	Measurement of Gas Heating Value, Specific Gravity and Diluent Content	2019-03-01
188.002	Gas Quality Monitoring	2023-02-01
188.03	Inspection & Maintenance of Daniel Gas Chromatographs and Their Sample Conditioning Systems, GC Verification	2022-05-01
188.005	Operation of U.S. Bureau of Mines Type Dew Point Tester	2020-04-24
188.0010	Natural Gas Odor Warning Notification – Transmission	2020-03-01
188.035	Welker Adjustable Sample Probe Model AP-3, with Installation & Retraction Tool	2020-07-30
188.0060	Gas Chromatograph Policies and Procedures	2023-05-01
188.0065	NGC 8206 Gas Chromatograph – Operation and Inspection – General	2019-02-01
189.0001	Odorization	2022-01-01
189.01	Odorization – Roles and Responsibilities	2019-05-24
189.0002	ODORIZATION-YZ NJEX Odorant Injection System Maintenance	2019-12-01
189.002	Odor Conditioning of New Steel Lines	2023-08-01
189.005	Operation of Odorometer	2021-02-01
190	Operator Qualification Task Change Communication	2020-10-09
190.0020	Verification of Index Read Unit Values	2021-12-01
191.01	Investigation of Accidents and Pipeline Failures	2022-10-01
191.0045	Excavation Permits/Paving Repairs	2023-01-01
191.0086	Pedestrian Path of Travel and Accessibility	2019-04-02
192.0025	GIS Maintenance Requirements for High Pressure Gas Lines	2022-12-09
192.0026	High Pressure Project Reconciliation, Closeout and Turnover	2023-09-01

Number	Document Title	Published On
192.0028	Providing Gas maps to External Requestors	2020-02-12
192.0030	Completion Drawing Set Requirements for High Pressure Pipelines	2023-03-01
203.017	Valve Inspections and Maintenance Self-Audit	2021-06-01
223.0001	CPUC and PHSMA Notification of Major New and Uprated Pipelines and Pressure Test Failures of Pipelines	2021-08-30
223.0002	Minimum Trench Requirements for Transmission Pipelines	2021-08-26
223.0003	General Construction Requirements – Steel Transmission System	2023-05-01
223.0010	Quick-Opening Closure (Unibolt) Safety	2023-02-01
223.010	Testing and Maintenance of Transmission Electrical Equipment	2021-11-29
223.016	Temporary End Closures	2023-09-13
223.0030	Investigation of Failures on Distribution and Transmission Pipeline Facilities	2021-03-01
223.0031	Abnormal Operations – Transmission	2020-08-01
223.0045	Pressure Vessel Inspection	2021-10-01
223.055	Engine Compressor Performance Analysis and Reporting	2021-03-29
223.0065	Pipeline Patrol and Unstable Earth Inspections	2022-04-01
223.0075	Pipeline Markers	2022-04-01
223.0095	External and Internal Transmission Pipeline Inspection	2020-12-01
223.0100	Leakage Surveys	2021-09-01
223.0104	Optical Methane Detector Operation and Maintenance	2020-10-01
223.0125	Leakage Classification and Mitigation Schedules	2022-05-01
223.0130	Abandonment, Conversion and Reinstatement of Transmission Pipelines	2020-12-10
223.0140	Excavating, Shoring and Sloping	2023-05-01
223.0145	Planning Shutdowns for Transmission and Storage	2023-09-15
223.0155	Planning Pipeline Blowdowns	2020-10-01
223.0160	Use of Portable Ranarex Gravitometers/Check Purges	2018-12-28
223.0177	Measurement of Remaining Wall Thickness	2020-12-01
223.0180	Repair of Defects in Steel Pressure Piping	2023-09-27
223.0181	Repair of Defects on Operating Pipelines Using Abandon Nipple	2021-04-20
223.0183	Repair of Defects on an Operating Pipeline by Grinding	2021-04-19
223.0185	Repair Leak on an Operating Pipeline With Band or Sleeve	2021-09-01
223.0188	Epoxy Grouted Non-Leaking Steel Sleeve Repairs – Above and Below Ground Piping	2021-09-01
223.0190	Repair on Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve	2021-06-01
223.0210	Vault Maintenance and Inspection	2022-01-01
223.0215	Valve Inspection and Maintenance - Transmission	2023-04-01
223.0230	Identification Numbers for Pipeline Valves – Transmission	2020-07-31
223.0233	Transmission Line Identification and Records	2021-03-08
223.0235	Pipeline Drips	2019-10-01
223.0240	Compressor Station Emergency Shutdown Systems	2019-04-11
223.0245	Torquing and Inspection of Threaded Fasteners for Engines and Compressors – Transmission and Storage	2023-06-13
223.0250	Compressor Station Equipment – Isolation and Purging for Maintenance or Alternations	2023-09-26

Number	Document Title	Published On
223.0255	Testing and Maintaining Compressor Station Emergency Shutdown Systems	2020-07-31
223.0260	Approved Lubricants and Hydraulic Fluids for Use in Equipment In or Near Compressor Buildings	2023-06-13
223.0265	Identification Numbers for Station Valves	2019-05-01
223.0275	Main Reciprocating Gas Compressor Unit Operation – Transmission and Storage Operations	2023-06-26
223.0280	Main Reciprocating Gas Compressor Maintenance – Transmission and Storage Operations	2023-06-12
223.0315	Operation and Maintenance of Generator Units – Transmission and Storage Operations	2023-06-26
223.0325	Main Centrifugal Gas Compressor Unit Operation	2023-06-26
223.0330	Main Centrifugal Gas Compressor Unit Maintenance	2023-06-13
223.0345	Pressure Relief/Pressure Limiting Devices, Testing/Inspection	2019-07-01
223.0360	Instrument Maintenance and Metering Devices – Storage Field and Transmission Facilities	2019-10-01
223.0375	MAXIMO – Transmission and Storage Operations	2023-02-01
223.0400	Gas Detectors in Compressor Stations	2019-01-31
223.0410	Requirements for Designing Pipelines to Accommodate Smart Pigs	2022-11-01
223.0415	Pipeline and Related Definitions	2023-05-01
224.0000	Testing and Inspection of Safety Valves and Wellhead Valves	2022-08-01
224.02	Operations of Underground Storage Wells	2021-09-27
224.05	Blowout Prevention Equipment	2023-01-01
224.010	Flow Erosion Monitoring and Assessment	2022-08-01
224.0015	Security and Accounting – Underground Storage Field Production Fluids	2019-07-01
224.023	Wireline and Slickline	2023-09-01
224.0030	Well Kill and Loading	2023-07-28
224.055	Well Unload	2023-06-29
224.070	Reservoir Integrity and Inventory Assessment	2023-01-01
677-1	Pipeline Condition and Maintenance Report	2023-09-15
2110	Management of Change for Gas Standards Related to Integrity Management Programs	2019-11-08
2112	Pipeline Database Update	2020-04-01
2120	Pipeline Feature Data Collection	2021-11-01
3083	Interference Data Sheet	2020-07-01
3084	Corrosion Tests General Data Sheet	2021-11-01
3222	Design Data Sheet (DDS)	2021-12-01
3466	Reporting of Gas Blown to Atmosphere	2020-11-01
3506	Notice of Shutdown / Operational Deviation	2023-09-15
3917	Project Weld Inspection Report	2022-09-01
3991	Odor Intensity Test Report	2023-08-01
4002	Pipeline Integrity Steel Pipe Sample Chain of Custody Form	2020-12-01
4003	Radiography Field Checklist	2020-04-07
4005	Coating Inspection Report	2020-11-01
4086-1	Cathodic Protection Basic Information Record	2021-11-12

Number	Document Title	Published On
4086-2	Cathodic Protection Routine Data Record – Rectifier Station	2019-12-01
4087-2	Cathodic Protection Routine Data Record – Galvanic Anodes	2019-12-01
4088-2	Routine Data Record – Interference On SoCal Piping	2019-12-01
4089-2	Routine Data Record – Cathodic Protection Supplied By Others	2019-12-01
4090	100mV Polarization Form	2022-02-01
4091	Wax Casing Data Collection Form	2021-05-21
4226	Odorant Report	2019-05-24
4227	Odorization Station Report	2019-05-24
4261	Gas Quality Report	2019-06-28
4416	Request for Relief Valve Capacity Calculation	2022-02-01
4669	Measurement Instrument Set/Remove Order	2022-09-01
4681	Orifice Meter Inspection Card	2019-07-26
4682-B	Orifice Meter Order	2023-02-22
4683	Meter and Regulator General Order	2019-05-01
5278	Meter Requisition	2019-05-14
6350	Report of Contractor's Performance	2020-01-01
6361	Quarterly Spill Response Equipment Inspection Log (Form 6361)	2023-03-30
6363	Hazardous Waste Aboveground Tank Inspection Log	2019-04-30
6365	Hazardous Waste / Pipe Storage Area Inspection Log	2018-12-31
6510	Environmental Inspections, Search Warrants, and Internal Notifications (For SoCalGas)	2022-09-26
CRMP6	Gas Control Management of Change	2023-04-01
PA-1	Public Awareness Plan	2022-12-30

APPENDIX F
ALISO CANYON LOCAL O&M PROCEDURES

K.V.S. Compressor Start and Stop Procedure	AC-KVS-COMP-100
Remove Power Cylinder Head	223.58-A / 1-303-A
Remove Power Piston	223.58-A / 1-304-A
Remove Power Cylinder	223.58-A / 1-305-A
Install Power Cylinder	223.58-A / 1-306-A
Install Power Cylinder Head	223.58-A / 1-307-A
Install Power Piston	223.58-A / 1-308A
Removal and Replacement of Compressor Cylinder	223.58-A / 1-309-A
Check Compressor Rod Runout	223.58-A / 1-310-A
Removal of Compressor Piston	223.58-A / 1-312-A
Installing Compressor Piston	223.58-A / 1-313-A
Check Timing of the Altronic II-CPU Ignition System for KVS Main Compressor Units	223.58-A / 1-314-A
Checking Connecting Rod Bearing and Piston Bushing Clearance by the Bump Method	223.58-A / 1-315-A
Checking Crankshaft Deflection	223.58-A / 1-316-A
Checking Crosshead Clearance	223.58-A / 1-317-A
Removing, Inspecting, and Replacing Compressor Packing	223.58-A / 1-318-A
Inspecting Turbocharger — KVS Units	223.58-A / 1-319-A
Changing Compressor Valve	223.58-A / 1-320-A
Servicing Hydraulic Valve Lifters	223.58-A / 1-322-A
Inspecting and Cleaning Compressor Building Basement	223.58-A / 1-323-A
Cleaning and Inspecting Heater Treaters	AC-FLD-HT-100
Operation of Thermal Fluid Heaters H-416, H-417 & H-418	223.58-A / 1-326-A
Cleaning of Odorant Contaminated Parts, Tools, and Pipefittings Using Household Bleach	223.58-A 1-328-A
GOPS Event for Aliso Canyon Storage Facility	AC-ELEC-GOPS-100
Starting and Stopping Compressors K-51A and K-51B	223.70-AC
Starting and stopping K-50	223.80-AC
Starting and stopping Porter Compressor Plant Units	223.90-AC
Aliso Canyon Main Station Emergency Shutdown Systems (ESD)	AC-STA-ESD-100
Starting and Operating Generator Units	AC-STA-GEN-101
Generator Unit Panels (No number available)	1-124-A
Gas Detector in Compressor Buildings — Calibration of General Monitors Model S104	AC-KVS-COMP-200
Fill and Drain the KVS Trabon Oil	AC-KVS-COMP-201
Add Odorant to Storage Tanks at Dehy #1, Dehy #2 & PCP	1-126-A
Fill and Drain the KVS Engine Oil	AC-KVS-COMP-202
Pressurize and Depressurize the KVS Compressor Unit	AC-KVS-COMP-203
Aliso Canyon Infrared Methane Leak Detection System Procedures	AC-FLD-FLMM-100
Main Station ESD System Stimulated Test	AC-STA-ESD-101
Main Station Generator ESD System Test	AC-GEN-ESD-101

Operating Procedure for the Electric-Driven Compressor(s) (EDC)	AC-EDC-COMP-100
Natural Gas Handling Procedures	AC-FLD-NGH-100
Leak Classification and Reporting	STOR-LKCLASS
TRANSFER TEG FROM T-27A TO DEHY 1 V-6A&B	AC-DHY2-T27A-100
TRANSFER TEG FROM T-27A TO DEHY 2 V-61A&B	AC-DHY2-T27A-101
Starting and Stopping Dehydration Plant #1	AC-STA-DHY1-100
Alternate Rectified Feed Pump Operation at Dehydration Plant #1	AC-STA-DHY1-101
Operation of Thermal Fluid Heaters H-416 and H-417	AC-STA-DHY1-102
Starting and Stopping Dehydration Plant #2	AC-STA-DHY2-100
Alternate Rectifier Feed Pump Operation at Dehydration Plant #2	AC-STA-DHY2-101
Operation of Thermal Fluid Heater H-418	AC-STA-DHY2-102
Storage Field Guidelines for New Fences and Well Enclosures	STOR-001
Injection/Withdrawal Mode	AC-STA-PIP-100
Adding Oil to Generators	AC-STA-GEN-200
UGS O&M Request Work Instructions	STOR-002
EDC Station ESD System Simulated Test	AC-EDC-ESD-101
Operating Instructions for XV-472 Line 1180 Main Block Valve	AC-STA-ESD-102
V-126 Strainer (F-126) Isolation Procedure	AC-FLD-V126-301
Vacuum Truck – Basic Operating Procedure	AC-EQU-VACTRK-001
Well Activity Notification Form	Well Activity Notification Form
Well Pressure Transmitter Addition/Removal Procedures	STOR-003
Protocol to Securing Gas Storage Wells Short Term and Long Term	STOR-004

APPENDIX G
ELECTRICAL REGULATION POLICIES AND REQUIREMENTS

1. ***CALIFORNIA GENERAL ORDER 95:***
   i. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M338/K730/338730245.pdf
2. ***CALIFORNIA GENERAL ORDER 128:***
   i. http://docs.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/52591.htm
3. ***CALIFORNIA GENERAL ORDER 165:***
   i. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf
   ii. Inspection Cycle Table below:

Table of Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Pad-mounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Pad-mounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Pad-mounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2[1]	5	5	---	---
Street lighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive	1	2	x	x	10	10
Wood poles which passed intrusive inspection	---	---	---	---	20	20

(1) Patrol inspections in rural areas shall be increased to once per year in Tier 2 and Tier 3 of the High Fire-Threat District. (See GO 95, Rule 21.2-D)

Note: This General Order does not apply to cathodic protection systems associated with natural gas facilities.

Note: For the purpose of implementing the patrol and detailed inspection intervals in Table 1 above, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

Note: For wood pole intrusive inspections, the term "year" is defined as a calendar year.

4. ***NFPA 70: NATIONAL ELECTRICAL CODE (NEC)***
5. ***CAL FIRE; POWER LINE PREVENTION FIELD GUIDE:***
    i. https://osfm.fire.ca.gov/media/3vqj2sft/2021-power-line-fire-prevention-field-guide-ada-final_jf_20210125.pdf

APPENDIX H
CAL-OSHA

http://www.dir.ca.gov/samples/search/query.htm

APPENDIX I
LA COUNTY FIRE DEPARTMENT REGULATIONS

1. ***HAZARDOUS MATERIALS PROGRAM:***
   i. California Health and Safety Code, Division 20, Chapter 6.95, Article 1
   ii. California Code of Regulations, Title 19
   iii. California Fire Code, Title 24, Part 9, Chapter 27, Sections 2701.5.1 and 2705.2
2. ***CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM:***
   i. California Health and Safety Code, Division 20, Chapter 6.95, Article 2
   ii. California Code of Regulations, Title 19
3. ***HAZARDOUS WASTE GENERATOR PROGRAM:***
   i. California Health and Safety Code, Division 20, Chapter 6.5, Articles 1-13, Section 25100
   ii. California Code of Regulations, Title 22, Division 4.5, Chapters 10, 11, 12 and 31
4. ***ABOVEGROUND PETROLEUM STORAGE TANK PROGRAM:***
   i. California Health and Safety Code, Division 20, Chapter 6.67, Section 25270

APPENDIX J
SOCALGAS JOBSITE SAFETY MEETING CHECKLIST

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Job Site-Specific Safety Plan (JSSP)

SoCalGas Contractor Safety Program

CONTRACTOR
JOB SITE-SPECIFIC SAFETY PLAN (JSSP)

Contractor- Please complete and return this Plan prior to commencement of work.

We (Contractor) have reviewed and accept the SoCalGas Contractor Safety Manual without exception

☐ *Accept*

*****FAILURE TO COMPLY WITH THIS REQUIREMENT MAY RESULT IN WORK STOPPAGE*****

CONTRACTOR NAME:	
PROJECT NAME:	
LOCATIONS:	
DATE:	

WELCOME!

It is SoCalGas' intent and goal to establish and maintain the safest work-site possible. To help accomplish this task we are requiring our Construction Contractors to submit this Job Site-Specific Safety Plan for each awarded contract for all **DOT/CPUC regulated high pressure natural gas pipeline jobs**. The JSSP will ensure that all hazards at the individual job locations have been identified and measures have been put in place to ensure the protection of all company and contractor employees and the general public.

GENERAL DESCRIPTION

A. SCOPE OF WORK:

Provide the maximum number of worker personnel (including subcontractor personnel) on site:

B. PROJECT TEAM (Name & Phone Number)

Project Manager:

Project Superintendent:

Safety Representative:

C. POINTS OF CONTACT IN THE EVENT OF AN EMERGENCY:

Incident commander assigned for the project:

D. ANTI-DRUG AND ALCOHOL MISUSE PREVENTION PROGRAM AND PLAN

The Contractor understands that any employee performing covered functions/tasks on a pipeline, Storage, or Liquefied Natural Gas (LNG) Facility regulated by 49 CFR Part 192, 193, and 195 are subject to drug and/or alcohol testing. The contractor on this project is subject to: pre-employment, random, post incident, reasonable cause, return-to-duty, and follow-up testing. All tests should be performed in accordance with 49 CFR Part 40 and Part 199. Please document the testing location in Attachment A.

E. FACILITIES FOR THE TREATMENT OF ON-THE-JOB INJURIES

We have identified that personnel requiring professional medical treatment for a presumed work-related injury will be transported to the following medical clinic or hospital (**name, address and phone number** needs to be provided).

Medical
Clinic:

Hospital:	

F. SUBCONTRACTORS

Please list all subcontractors you will be hiring:

Subcontractor Name	Supervisor Name

GUIDANCE FOR COMPLETING THE JOB SITE-SPECIFIC SAFETY PLAN (JSSP)

The JSSP is a project-driven pre-planning document used to ensure every project location receives proper safety assessment and planning. **Multiple copies of selections below may be required to address hazards that may be present at each project location.** Only one copy of each JSSP section is required for projects with one location.

A Job Site-Specific Safety plan is required to be submitted by each Contractor at a job location, this includes the Pipeline Contractor, Civil Contractor, Non-Destructive Testing Contractor, LNG/CNG Contractor or other contractors having a direct contract with SoCalGas.

Example: The same Personal Protective Equipment may be required on all project locations, therefore only one section “q. Personal Protective Equipment” would need to be submitted. However, if the project has multiple Traffic Control/Work Zone locations, you would need to submit section “w. Traffic Control/ Work Zone Safety” for each location.

The preferred method for JSSP submittal is an electronic copy. This electronic version is the least labor-intensive method of completing the JSSP.

Prior to filling out the JSSP please identify all of the individual work locations associated with the project. Making note of the individual jobsite locations during the initial job walk will be beneficial when completing the JSSP.

Things to consider when completing the JSSP:

- Are there any hazards that are unique to each project location?
- Have you determined the appropriate training for each project location?
- Have you determined the required PPE for each project location?
- Have you included safe work practices for each project location?

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x. Other safety issues/concerns that need to be addressed

IF A SECTION IS NOT APPICABLE TO YOU PLEASE INDICATE AS NOT APPLICABLE.ALL OTHER SECTIONS SHOULD BE FILLED OUT ACCORDINGLY AS THEY RELATE TO THE CURRENT SCOPE.

a. ADMINISTRATIVE DOCUMENTS

Project Location Identifier:

Will the JSSP be available for review at the jobsite? (Yes/No)

If no, please describe:

Will the IIPP be available for review at the jobsite? (Yes/No)

If no, please describe:

Will the SoCalGas Contractor Safety Manuel requirements be onsite and available for review? (Yes/No)

If no, please describe:

Will the site safety orientation be conducted and documented by the contractor? (Yes/No)

If no, please describe:

Will your subcontractors training qualifications documents/records be at the project site and available for review? (Yes/No)

If no, please describe:

b. AERIAL LIFTS

Project Location Identifier:

Will your employees be operating aerial/scissor lifts? (Yes/No)

If yes, how will you provide the proper training?

How will you provide verification of daily inspections for all aerial/scissor lifts?

Will your employees wear fall protection when operating aerial/scissor lifts? (Yes/No)

If yes, what form of fall protection will be used?

c. ASBESTOS/LEAD

Project Location Identifier:

Will you be handling, disturbing, abating or working around any Asbestos/Lead or Asbestos/Lead containing material? (Yes/No)

If yes, please describe:

What level of training have your employee completed in regard to Asbestos and Lead?

Who is confirming if Asbestos or Lead Containing Materials are present?

Who will be performing the abatement of any Asbestos or Lead Containing Materials?

What personal protective equipment will be worn when handling Asbestos or Lead Containing Materials?

Note: Any identification of possible and/or confirmed Asbestos or Lead Containing Material must be reported to the SoCalGas Representative.

d. CONCRETE/SLURRY

Project Location Identifier:

Will you be doing any concrete work? (Yes/No)

If yes, what type of form-work will you be using?

What type of shoring will you be using?

All form-work/shoring shall be designed by a P.E. Please provide name:

What type of fall protection will be used on form-work (i.e., decks/walls)?

What personal protective equipment will be worn when working in concrete and slurry?

e. CRANES

Project Location Identifier: _____

Note:

- Be advised that cranes will not be allowed to operate on this job-site without a current inspection.
- Crane operator qualifications must be provided to SoCalGas Representative.

Will you be using a crane? (Yes/No)

If yes, will you be hiring your own crane? (Yes/No)

Are you aware of Critical Lift Procedures? (Yes/No)

Will you be submitting a lift plan? (Yes/No)

If no, please inform the SoCalGas Representative.

What will you be lifting?

(If your crane requirements are more extensive than can be described here please provide a separate, complete and detailed description of your requirements.)

Where will the crane be located?

Where will the pick start and end?

CRANES (Cont.)

Do you anticipate any picks being Critical Lifts? (Yes/No)

If yes, please describe:

Please note: Anyone signaling/rigging loads must complete training for signaling/rigging. Please be prepared to provide the SoCalGas Representative with documentation of the completed training when requested.

f. DEMOLITION

Project Location Identifier:

Will your work require any demolition? (Yes/No)

If yes, please describe:

What precautions will be necessary to protect workers and other personnel?

What will you do to restrict unauthorized personnel from entering demo area?

How will you barricade or demarcate the area to be demolished?

Will your work require concrete demolition or cutting? (Yes/No)

If yes, how will you protect site personnel and the public from Silica Dust?

g. EMERGENCY PREPARENDNESS PROCEDURE

Project Location Identifier:		

Will the site-specific emergency preparedness plan be onsite? (Yes/No)

If no, please describe:

Have all emergency personnel been identified and posted onsite? (Yes/No)

If no, please describe:

Will rally points at the jobsite location be identified if an emergency occurs? (Yes/No)

If no, please describe:

h. ELECTRICAL

Project Location Identifier:		

Will you be doing any electrical work? (Yes/No)

If yes, what are the voltages you will be working with?

Will employees be handling energized electrical parts and/or lines? (Yes/No)

If yes, describe: *This work must be confirmed and authorized by the SoCalGas Representative.*

Will you be responsible for providing temporary power for your personnel and/or the project? (Yes/No) | | |

If yes, describe daily maintenance procedures

Do you have an Energy Isolation Program? (Yes/No) | | |

If yes, please provide a copy to the SoCalGas Representative.

If no, one will be required for this project and before work can commence.

i. EXCAVATION/TRENCHING

Project Location Identifier:

Will you be moving any dirt? (Yes/No)

If yes, who is your Competent Person for excavations?

Will you be using any heavy equipment? (Yes/No)

If yes, what type? What is the depth of the deepest excavation?

What type of protective shoring systems will be used?

Will you be moving any dirt off-site? (Yes/No)

If yes, what special procedures will be necessary for hauling dirt on public streets?

Will you be using Flaggers? (Yes/No)

Will you be excavating in proximity to live utilities? (Yes/No)

If yes, what procedures will you use to prevent damage?

Will you need to apply for a Cal/OSHA permit? (Yes/No)

If yes, proof of permit may be required during an audit.

j. FALL PROTECTION

Project Location Identifier:		

Will your employees be exposed to any fall hazards? (Yes/No)

If yes, describe:

What fall protection measures will you use?

Will your work expose your employees to floor openings, wall openings or leading-edge work? (Yes/No)

If yes, describe:

What procedures will you use to ensure your employees and other project personnel are not exposed to fall hazards?

Where will the inspection records for Fall Protection Equipment be stored?

k. MOBILE EQUIPMENT

Project Location Identifier:

Will you be operating mobile equipment? (Yes/No)

If yes, how will you provide the proper training?

How will the hazards associated with operating mobile equipment around blind spots be mitigated?

Where will the mobile equipment daily/pre-use inspection logs be kept?

What material will you be moving with mobile equipment?

I. HOT WORK

Project Location Identifier:

Will you be performing any activities that generate heat or sparks? (Yes/No)

If yes, how will the following control measures be implemented to eliminate or reduce the possibility of a fire or explosion? (Mark all that apply)

- ☐ Smoking in designated smoking areas only.
- ☐ A “Hot Work” Permit is to be completed.
- ☐ A “Fire Watch” is to be present when hot work is being performed.
- ☐ Combustible air monitoring is to be performed if there is a potential of a combustible atmosphere.
- ☐ Combustibles within at least a 35-foot radius of the hot work are to be removed or protected.

Will you be performing Hot Work activities during potential “Red Flag” warning periods? (Yes/No)

If yes what control measures will you implement?

m. HOUSEKEEPING

Project Location Identifier:

What will be your procedures for housekeeping and cleanup?

How will exits and access be kept unobstructed?

How will work areas be kept clean and free of debris?

How will trash and debris be removed from the site for disposal?

n. LADDERS

Project Location Identifier:

Will your work require the use of ladders? (Yes/No)

If yes, describe the procedure for the pre-use inspection of ladders.

How often are documented ladder inspections performed?

Where are documented ladder inspections kept?

What precautions will be necessary to ensure workers maintain 3-points of contact while ascending and descending ladders (2-feet and 1- hand or 1-foot and 2-hands)?

What precautions are taken when a defective ladder is discovered on the job site?

What precautions are taken to ensure ladders do not exceed the designated weight capacity (worker and materials)?

o. MASONRY

Project Location Identifier:

Will you be doing any masonry work? (Yes/No)

If yes, how will you protect impalement hazards?

What precautions will you take while cutting concrete bricks and blocks?

What personal protective equipment will be worn when cutting bricks and blocks?

What precautions will you take to protect your employees and other site workers below and around your work?

p. MATERIAL STORAGE

Project Location Identifier:

Where will construction material be stored/staged?

Will you be using any flammable/combustible liquids? (Yes/No)

If yes, where will these be stored?

What fire prevention/protection precautions will be taken?

What spill prevention precautions will be taken?

q. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Project Location Identifier:		

Will your operations generate dust, fumes or potentially harmful gases? (Yes/No)

If yes, describe:

What respirator precautions will you take?

What precautions will you take to protect other project personnel from dust, fumes or potentially harmful gases?

Will your employees be exposed to specific eye hazards? (Yes/No)

If yes, describe:

What additional eye protection measures will you take, besides safety glasses with side shields?

Will your employees be exposed to any potentially harmful chemicals? (Yes/No)

If yes, describe:

PERSONAL PROTECTIVE EQUIPMENT (Cont.)

What PPE requirements will be necessary to handle potentially harmful chemicals?

What precautions will you take to protect other personnel on the project from potentially harmful chemicals?

Will you have work that requires any special PPE? (Yes/No)

If yes, describe:

r. PIPING/PLUMBING

Project Location Identifier:

Will you be working with piping or plumbing? (Yes/No)

If yes, will this piping or plumbing contain pressurized fluids and/or gas? (Yes/No)

If yes, what precautions will be taken?

Will hot taping be performed on energized gas lines? (Yes/No)

If yes, the SoCalGas Representative must confirm and authorize

If yes, do you have a hot taping procedure for energized gas lines? (Yes/No)

What other potential hazards and precautions have you identified associated with this task?

s. PUBLIC PROTECTION

Project Location Identifier:		

Will any of your work be in close proximity to the public or employees of an existing facility? (Yes/No)

If yes, what precautions will be necessary to protect non-construction personnel?

What precautions will be necessary to protect the public from slip, trip and fall or other hazards?

What Warning/Danger signs will be posted at the project entrance?

How will you control dust or other hazardous substances?

t. SCAFFOLD

Project Location Identifier:		

Will you be using scaffolds? (Yes/No)

If yes, who is your Competent Person for scaffolding?		

What type of scaffolding?

Location?		

Who will erect it?		

Who will inspect it daily?		

Will the nature of the scaffold require it be designed by a Registered Professional Engineer (Yes/No)

If yes, the stamped drawings shall be provided to the SoCalGas Representative.

Will you be using scaffolding to shore formwork or for re-shoring? (Yes/No)

If yes, the stamped drawings shall be provided to the SoCalGas Representative.

u. SITE ORIENTATION/PRE-TASK PLANNING

Project Location Identifier:

Where will the Site-Specific Orientations be conducted?

Where will the Pre-Task planning meetings be conducted?

Please list your Heat Related Illness precautions.

v. TOOLS

Project Location Identifier:		

Will you be using powder-actuated tools? (Yes/No)

If yes, how will you provide the proper training?

How will the unused shots be stored?

How will the used shots be disposed?

Will you be operating lasers? (Yes/No)

If yes, how will you provide the proper training?

Will you be operating table saws? (Yes/No)

If yes, how will you ensure guards remain in place?

Will you be using other power tools? (Yes/No)

If yes, list tool with safety precautions/guards/training necessary for operation.

w. TRAFFIC CONTROL/WORK ZONE SAFETY

Project Location Identifier:

Is the work on or adjacent to a roadway? (Yes/No)

Is a Traffic Control Plan necessary or required? (Yes/No)

Is a Traffic Control Permit required? (Yes/No)

Who will be providing traffic control?

Will paving be required after the work is completed? (Yes/No)

Is the paving work included in your traffic control plan? (Yes/No)

Will work be performed at night? (Yes/No)

What other precautions will be taken to address construction and non-construction personnel?

What personal protective equipment will be required when working on or adjacent to a roadway?

x. OTHER SAFETY ISSUES/CONCERNS THAT NEED TO BE ADDRESSED

Project Location Identifier:		

If yes, describe:

This Job Site-Specific Safety Plan has been prepared for:

Project Name/Number:

I, as a member of the Project Team, have read and am fully aware of the contents of this Plan. Additionally, my company is aware of and understands the safety requirements governing this job-site and will, in good faith, attempt to perform all tasks in accordance with same.

Signature of Contractor Representative

Date:

By a representative of:

Company:	
Address:	
Name:	
Email:	
Phone:	

APPENDIX K
ALISO CANYON TRAINING COURSES

166.0025 Prevention of Accidental Ignition of Natural Gas	167.35 Lockout/Tagout - Hazardous Energy Control Program
224.0000 Testing and Inspection of Safety Valves and Wellhead Valves	224.0030 Well Kill and Loading
224.010 Flow Erosion Monitoring	224.02 Operations of Underground Storage Wells
224.055 Well Unload	224.104 Well Isolation
224.107 Blowout Contingency Plan	224.109 Abnormal Operating Conditions - Underground Storage
224.110 Wellsite Security and Safety	224.111 Training - Storage Wells and Reservoir
224.112 Emergency Preparedness and Response Effectiveness	224.115 Inspection of Third Party Wells
224.116 Nonconformance of Storage Wells and Reservoir	224.119 Pressure Monitoring
224.120 Storage Field Interaction with Gas Control	224.121 Field Procedure - Emergency Incidents Storage
Abnormal Operating Conditions	Aliso Canyon Safety Orientation
Altair 5X Multi-Gas Detector Unit	Arc Flash Training
Asbestos	Bear Awareness
Code of Business Conduct	Confined Space Operations
Discrimination and Harassment Free Workplace	Dehydration Plant #1
Dehydration Plant #2	DOT Hazardous Materials Transportation
Drug and Alcohol Misuse Prevention Plan and Drug and Alcohol-Free Workplace	Electrical Safety
Emergency Action and Fire Prevention Plan	Emergency Incidents – Underground Storage Wells
Emergency Incidents Transmission	Emergency Plan
Emergency Shutdown System	Eye Safety
Employee Conduct and Responsibilities	Fall Protection
Facility Stormwater Requirements Training	Fire Drill Evacuation / Fire Permits / Emergency Action Plan
Field Ergonomics	Forklift Operating & Training
Fire Prevention and Protection	GOPS Review
Gas Emergency Management Preparedness and Response	Hazardous Energy Control Program
Grounding & Bonding Flammable Liquid Containers	Hazardous Waste Generators
Hazardous Materials Business Plan	Hearing Conservation
Hazcom – Product Approval Process	Heat Stress
Heat Illness Prevention Program	Hydrogen Sulfide
Hot Work Permit Process	Insect Bite Prevention
IIPP Review	Lead and Metals in Surface Coatings: Hazardous Awareness

Ladder Safety	Lockout/Tagout - Authorized and Affected Employees
Locate & Mark Retest and Review	Low-Voltage Electrical Safety Program
Lockout/Tagout for Other than Authorized and Affected Employees	Medic First Aid & Blood borne Pathogen Awareness
MCR Training	Odor Conditioning of New Steel Lines
Natural Disaster or Major Emergency Employee Instructions	Orion 4 Gas Monitor Training
Office Safety	Pesticide Handling and Storage
Personal Protective Equipment	Poison Oak
Physical Security Policy	Preventing Hand Injuries
Preventing Back Injuries	Pulmonary Program
Public Awareness and Damage Prevention	Release Reporting Awareness
Refresher Fire Extinguisher Training	Reports of Safety-Related Pipeline Conditions
Reporting Requirements for CPUC Citations and Self-Reporting Possible Violations	Safety in Motion
Respiratory Protection	SIMP.101 - Introduction to SIMP
Security Awareness	SIMP.6 - Management of Change
SIMP.15 - Emergency Response Plan	SIMS Lifting Options and Techniques
SIMP.9 - Records Management Plan	Snake Awareness
Smith Defensive Driving	SoCalGas Vehicle and Handheld Radio Guide
SoCalGas Release Reporting Awareness	Storm Water Pollution Prevention
Spill Prevention Control and Countermeasure (SPCC) Plan	Violence in the Workplace Prevention
Towing Basics	Working in a Hazardous Atmosphere