

SECTION FIVE

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5.16 WORKER SAFETY

This section describes systems and procedures that will be implemented to provide occupational safety and health protection for the Salton Sea Unit 6 (SSU6) Project workers in accordance with applicable laws, ordinances, regulations, and standards (LORS). Applicable elements of Title 8 of the California Code of Regulations (CCR), which include the General Industry Safety Orders (GISO), Construction Safety Orders (CSO), Electrical Safety Orders (ESO), Elevator Safety Orders and Unfired Pressure Vessel Safety Orders with special attention to the Injury and Illness Prevention Program (IIPP) requirements, are addressed. This section provides a discussion of the affected environment, environmental consequences, mitigation measures, and applicable LORS for the proposed SSU6 Project. Tables are found at the end of this section.

5.16.1 Affected Environment

The proposed SSU6 Project is located south of the Salton Sea. This region of the Imperial Valley is used mostly for agriculture and geothermal power production. This Worker Safety section for the SSU6 Plant consists of the following components: the Geothermal Plant Facility, Parking, and Construction Staging and Lay-down Areas; Production Well Pads; Injection Well Pads; Production Pipelines; Injection Pipelines; Transmission Lines; and Water Supply Line. The plant layout is depicted on Figure 3.3-1A. Anticipated hazardous materials usage and storage are listed in Tables 5.14-1. Worker exposure to safety issues related to this project is limited to onsite activities related to construction and operations.

5.16.2 Environmental Consequences

Facility construction, operation, and maintenance activities may expose workers to the hazards identified in Table 5.16-1. Some of these potential hazards are inherent to specific construction activities, but are not necessarily relevant to operations, and vice versa. Exposure to these hazards is expected to be minimized through adherence to appropriate engineering design criteria and administrative controls, use of applicable personal protective equipment, and compliance with applicable health and safety laws, ordinances and standards. The programs, regulations, and preventive measures intended to protect worker health and safety are described in the construction and operations portion of this section. The comprehensive health, safety, and fire prevention program enforces safe and healthful practices and implements an accident/injury prevention program intended to ensure safe and healthful operations at the facility.

5.16.2.1 Construction Safety Program

During construction, the Applicant will hold the general construction contractor (Contractor) responsible for enforcing contract provisions to assure compliance with the all health and safety requirements to comply with California Occupational Safety and Health Administration (Cal-OSHA) regulations and to ensure the safety and health of its employees and its subcontractors. The Contractor will ensure that an appropriate number of onsite persons are trained in rendering first aid; the closest emergency medical clinic to the site is the Pioneers Memorial Healthcare at 207 W. Legion Road, Brawley, California approximately 18 miles south of the site.

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Prior to construction, the relevant contractor will possess or obtain a valid construction activity permit and provide the proper *Activity Notification Form for Holders of Annual Permits* pursuant to Title 8, California Code of Regulations, Chapter 4, Subchapter 4, from Cal-OSHA to enable construction of buildings/structures greater than 36 feet or three stories high. The relevant contractor will also possess or obtain a valid permit if a mobile tower crane is used. All cranes with a rated capacity exceeding 3 tons will be certified per 8 CCR 5021. Applications for permits and requirements for certifications will be addressed to the San Diego District Office of Cal-OSHA.

An erection plan or notification will be submitted to Cal-OSHA prior to installation of any elevators pursuant to 8 CCR 3001(a)(1).

5.16.2.1.2 Construction-Injury and Illness Prevention Program

The written Construction Safety Program will meet the Cal-OSHA IIPP requirements of 8 CCR 1509 by inclusion of the following:

- A written Code of Safe Practices that relates to construction operations.
- Posting of the Code of Safe Practices at a conspicuous location at each job site office or providing it to each supervisor who shall have it readily available.
- Periodic meetings of supervisors and management to discuss past safety incidents and identify and implement corrective actions, as required.
- A system ensuring employee and subcontractor compliance.
- Procedures for promptly correcting unsafe conditions.
- Identification of the person or persons responsible for implementing the program.
- The system for identifying workplace hazards, including inspections.
- “Tool box” or “tailgate” meetings conducted for employees by supervisors emphasizing safety.
- Methods of communicating with employees encouraging employees to identify unsafe activities.

When workers are first employed they will be given instructions regarding the hazards and safety precautions applicable to the type of work in question and directed to read the Code of Safe Practices. When employees are subject to known job site hazards they shall be instructed in the recognition of the hazard, the procedures for protecting themselves from injury and in the first aid procedure in case of injury. The Contractor shall ensure that all its employees and subcontractor employees are health and safety qualified (including meeting relevant health and safety training requirements) in their respective work disciplines and crafts.

5.16.2.1.3 Construction-Written Safety Programs

Written safety programs that will be implemented for the construction phase include, but are not limited to:

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- Employer and employee rights and responsibilities under the programs (8 CCR 1509).
- Confined space entry and rescue procedures (8 CCR 5156-5158).
- Electrical equipment safety procedures (8 CCR 1760).
- Lock out/tag out procedures (8 CCR 3314).
- Hearing Conservation Program (8 CCR 5095-5100).
- Personal protective equipment (8 CCR 1514).
- Respiratory Protection Program (fit-testing procedures) (8 CCR 5144).
- First-aid/Blood-borne Pathogens Program (8 CCR 1512; 8 CCR 5193).
- Ladder and scaffolding procedures (8 CCR 1635.1 - 1678).
- Housekeeping, material handling and storage procedures (8 CCR 1513).
- Injury and accident reporting and recording procedures (8 CCR 1509).
- Small tool and shop equipment procedures (8 CCR 1684 - 1708).
- Crane and hoist procedures (8 CCR 1581-1589; 8 CCR 1610-1616).
- “Tool box/tailgate” safety meetings (8 CCR 1509).
- Equipment inspection programs (8 CCR).
- Security programs (8 CCR 1509).
- Excavation and trenching programs (8 CCR 1539-1547).
- Project work procedures (as developed).
- Hazard Communication Program, including Hazardous Waste Control, Hazardous Material Handling, and California Proposition 65 (8 CCR 5194).
- Emergency Action Plan, including evacuation procedures (8 CCR 3220).
- Recordkeeping procedures (8 CCR 3203-3204).
- Fire Protection and Prevention Plan (8 CCR 3221).
- Suitable work clothing.
- Ventilation (8 CCR 5142-5143; 8 CCR 1530; 8 CCR 1536).
- Ergonomics (8 CCR 5110).
- First Aid and Medical Services (8 CCR 1512).
- Smoking Policy.
- Medical record access procedures (8 CCR 3204).
- Hazard Identification Team and Safety Marshall programs.

- Heavy equipment procedures (8 CCR 1590-1596).
- Welding and cutting procedures (8 CCR 4794-4848; 8 CCR 1536-1537).
- Compressed gas and air handling procedures (8 CCR 4648-4665).
- Subcontractor safety programs.
- Bomb threat procedures.
- Supervisor safety and health orientations.
- Vehicle and traffic procedures (8 CCR 1597-1599).
- Signs, tags, and barricades (8 CCR 1597-1599).
- Chemical exposure monitoring program (to include H₂S and benzene) (8 CCR 5155; 8 CCR 5218).

5.16.2.1.4 Construction-Personal Protective Devices

Employees will be required to use the required personal protective equipment (PPE) during construction. Required PPE shall be approved for use and distinctly marked to facilitate identification as required by 8 CCR 1514. PPE will be used in accordance with the manufacturer's instructions. The PPE will be of such design, fit and durability as to provide adequate protection against the hazards for which they are designed. The type of PPE required for each job task will be described in the job safety analysis for that task. The use of PPE for site activities includes, but is not limited to, the items specifically described in Table 5.16-2, and will comply with Cal-OSHA requirements. When protective-insulating equipment is used, it will comply with the Electrical Safety Codes as required by 8 CCR 1518.

The work atmosphere will be tested/sampled per established protocols. A respiratory protection program complying with Title 8, California Code of Regulations, Section 5144 (8 CCR 5144), will be developed that includes respirator training, fit testing, monitoring, selection, etc., if testing results warrant the need. If monitoring suggests that the potential exposure to hydrogen sulfide (H₂S) exists, an approved supplied-air type respirator may need to be used during certain activities (e.g., drilling).

5.16.2.1.5 Construction-Onsite Fire Suppression and Prevention

The SSU6 Project will rely on both onsite fire protection systems and local fire protection services. The contractor will develop a Fire Protection and Prevention Plan to be followed throughout all phases of construction and provide the necessary fire-fighting equipment.

During construction, the permanent facility fire suppression systems will be placed in service as early as practicable. Construction fire prevention regulations in 8 CCR 1920 et seq. will be followed as necessary to prevent construction fires. Special attention will be given to operations involving open flames, such as welding, and the use of flammable materials, and to the hazards created by the potential existence of H₂S. Personnel involved in such operations will have appropriate training by the contractor. A fire watch, using the appropriate class of extinguishers

or other equipment, will be maintained during hazardous or hot work operations as required. Site personnel will not be expected to fight fires past the incipient stage. As necessary, the fire protective measures shall be coordinated with the local fire protection services.

Materials brought on site must conform to contract requirements, insofar as flame resistance or fireproof characteristics are concerned. Specific materials in this category include fuels, paints, solvents, plastic materials, lumber, paper, boxes, and crating materials. Specific attention will be given to compressed gas, fuel, solvent, and paint storage. Electrical wiring and equipment located in inside storage rooms used for Class I liquids will be stored in accordance with Electrical Safety Orders and as prescribed by 8 CCR 5530. Outside storage areas will be designed to divert possible spills away from buildings and will be kept clear of vegetation and other combustible materials. Precautions will be taken to protect storage areas against tampering where necessary.

Elements of the onsite fire suppression system during construction will consist of portable and fixed fire-fighting equipment. Portable fire fighting equipment will consist of fire extinguishers and small hose lines that conform to Cal-OSHA and the National Fire Protection Association (NFPA). The contractor's safety representative will conduct periodic fire prevention inspections.

Fire extinguishers will be inspected routinely and replaced immediately if defective or in need of recharge as required by 8 CCR 6151. All fire-fighting equipment will be located to allow for unobstructed access to the equipment and will be conspicuously marked. A temporary or permanent water supply, of sufficient volume, duration and pressure to operate the required fire-fighting equipment, will be provided as combustible materials accumulate. Designated, approved flammable materials storage areas and flammable materials storage containers will be provided with adequate fire prevention systems.

5.16.2.1.6 Construction-Offsite Fire Suppression Support

The SSU6 onsite fire suppression systems will be supported by the Calipatria City Fire Department (the Calipatria City Fire Department is contracted by the Imperial County Fire Department, the department with jurisdiction over the site, to provide fire response services to this area), which will provide backup assistance. The local fire response units will be provided information regarding the type and location of potential fire hazards. This information will be included in emergency response planning. Routine fire prevention inspections and annual Structure Response Drills will be conducted by the Calipatria City Fire Department.

5.16.2.1.7 Drilling and Construction of Wells

Because of the potential of H₂S and geothermal steam exposure during the drilling and construction of geothermal wells, the SSU6 Project will develop and implement a plan to minimize risks from these hazards as guided by the State of California, Division of Oil, Gas and Geothermal Resources, Publication No. M10 ("Drilling and Operating Oil, Gas, and Geothermal Wells in an H₂S Environment"). These plans will be coordinated with local emergency service providers and may include provisions related to hazard detection and monitoring, fire prevention, site control, emergency response and specialized equipment and techniques.

The non-condensable gas (NCG) stream is expected to contain benzene. This suggests that there is also a possibility that worker exposure to benzene could occur during well installation and development. Therefore, monitoring will be conducted to determine whether benzene exposure is within the Cal-OSHA exposure limits. If monitoring results suggest possible exposures higher than the Cal-OSHA limits, a program to minimize exposures will be implemented in conformance with 8 CCR 5218.

5.16.2.2 Plant Operational Safety Program

Employee safety programs will be implemented for the operational phase of the SSU6 Project. These programs will include:

- Regular employee education and training in safe work practices for general and specific task areas.
- Accident and incident evaluations.
- Emergency response.
- Contractor and visitor safety.
- Maintenance of safety performance data.
- Communication of hazards in accordance with federal and state standards.
- Administrative safety procedures.
- Fire prevention and fire response.
- Security.

Operations personnel will be provided with written safety guidance. Construction safety programs and procedures applying to facility operations will be incorporated into the plant operational safety program.

5.16.2.2.1 Safety Permits, Certifications and Registrations

Prior to using any pressure air tanks or LPG propane tanks over 125 gallons, the site will obtain permits to operate such equipment pursuant to 8 CCR, Subchapters 1 and 2.

A Permit to Operate will be obtained from Cal-OSHA prior to operating any newly installed elevator and shall be renewed annually pursuant to 8 CCR 3001(c).

5.16.2.2.2 Operations-Injury and Illness Prevention Program

The primary mitigation measures for worker hazards during plant operations are contained in the IIPP, which is required by 8 CCR 3203. As required by 8 CCR 3203, the written IIPP will contain the following information:

- Identity of the person(s) with authority and responsibility for implementing the program.
- A system for facilitating employer-employee communications.
- Methods for correcting unhealthy/unsafe conditions in a timely manner when there is an imminent danger.

- Methods of documenting inspections and training, and for maintaining records for three years.
- A training program for:
 - Introducing the program
 - New, transferred, or promoted employees
 - New processes and equipment
 - Supervisors
 - Contractors
- Procedures for identifying and evaluating workplace hazards including inspections to identify hazards and unsafe conditions .
- A system for ensuring that employees comply with safe and healthy work practices.

The IIPP will designate a safety representative who is responsible for implementing the program 8 CCR 3203(a)(1). It will also describe safety training for new employees and procedures for tracking safety training. The IIPP will provide the Job Hazard Assessments (JHA) for each job. The JHAs will identify safety hazards related to each work task and establish procedures for avoiding, correcting, reporting, and notifying employees of these hazards.

5.16.2.2.3 Operations-Written Safety Program

The IIPP will be used in conjunction with other written safety programs. These programs include, but are not limited to, the following:

- Safety Committee.
- Prevention of Cumulative Trauma Disorders/Ergonomics/Repetitive Stress Injuries (8 CCR 5110).
- Fire Protection and Prevention Plan (8 CCR 3221).
- Respiratory Protection Program (8 CCR 5144).
- Lock Out/Tag Out Safety Procedure (8 CCR 3314).
- Confined Space Entry and Rescue Procedures (8 CCR 5156-5158).
- Abrasive Grinders (8 CCR 3575-3583).
- Compressed Gas and Air Handling Systems (8 CCR 4648-4665).
- Electrical Safety (8 CCR 2299-2974).
- Personal Protective Equipment (8 CCR 3380).
- Good Housekeeping (8 CCR 3221; 8 CCR 3262).
- Hand Tools and Equipment Guarding (8 CCR 3555-3564; 8 CCR 3940-4077).
- Portable Electric and Air-Power Tools (8 CCR 3555-3559).
- Preventing Slips, Trips, and Falls.
- Signs, Tags, and Barricades.
- Job Hazard Analysis (8 CCR 3203).
- Emergency Action Plan, including evacuation procedures (8 CCR 3220).
- Hazard Communication Plan (8 CCR 5194).

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- Hearing Conservation Program (8 CCR 5095-5100).
- Contractor Safety.
- Code of Safe Practices for Equipment and Operation (8 CCR 3203).
- Prevention of Back Problems.
- Blood-borne Pathogens Program (8 CCR 5193).
- Industrial Truck (forklifts) Safety (8 CCR 3650-3669).
- Gas Cylinders (8 CCR 4649-4665).
- Hand Protection (8 CCR 3384).
- Hoist/Chain/Wire Rope/Webs/Rope Slings/Cranes (8 CCR 4884-5049).
- Portable Ladders and Scaffolding (8 CCR 3278-3280; 8 CCR 3275).
- Welding, Cutting, and Brazing (8 CCR 4794-4848).
- Hazardous Materials Handling Procedures and Hazardous Waste Control (8 CCR 5160-5188; 8 CCR 5192).

5.16.2.2.4 Operations-Safety Training Programs

Operations employees will be given instructions regarding their responsibility for the safe conduct of their work. These instructions will be given at the time the employee is first hired and as an ongoing training program of hazard recognition and avoidance.

Employees will also be instructed in the safety regulations pertinent to their employment tasks. Safe working conditions, work practices, and protective equipment requirements will be communicated in the following manner:

- A new, promoted, or transferred employee will receive safety training orientation.
- “Toolbox/tailgate” safety meetings will be conducted periodically for each crew. General safety topics and specific hazards that may be encountered will be discussed. Comments and suggestions from all employees will be encouraged.
- Material Safety Data Sheets will be provided for all appropriate chemicals.
- Regularly scheduled safety meetings will be held for supervisors.
- A bulletin board with required postings and other information will be maintained at the plant site.
- Hazard communication training, including California Proposition 65 warnings and discharge prohibitions, will be conducted as new hazardous materials are introduced to the workplace.
- Warning signs (e.g., hazardous waste storage area, confined space area) will be posted in hazardous areas that comply with applicable regulations (i.e., bilingual, font size).
- Safety meetings will be held with employees.

Safety training will be provided to each new employee as described below:

- A list of safe work rules for the SSU6 facility will be explained to each new employee.

- A copy of the applicable Safe Work Practices will be given to each new employee. The provisions will be incorporated into training for the qualifications program so that employees may fully understand what the protective provisions mean.
- Safety requirements for the new employee's specific job assignment will be explained by the supervisor upon initial assignment and upon any reassignment. Some of these may include training for Hearing Conservation, Respiratory Protection, PPE, Lock-out/Tag-out, Forklift, Confined Space Entry.
- Unusual hazards that are found on site will be explained in detail to each new employee, including any specific requirements for personal protection.
- The Hazard Communication Program and requirements for personal protection for the types of hazards that may be encountered at the SSU6 facility will be explained and documented.

An element of the Safety Training Program includes ensuring contractor safety while on site. Contractors will be screened before they are retained to ensure minimum knowledge of assigned activity. Contractors will be provided with a list of potential job safety hazards for their assigned activity by a supervisor, including safety rules, chemical exposure hazards, physical hazards, and personal protection equipment. Contractors will also be invited to attend "tailgate" safety meetings.

5.16.2.2.5 Personal Protective Clothing and Equipment

Personal protective clothing and equipment will be used during specified work operations as identified in a Job Hazard Analysis required by 8 CCR 3203. Each employee will be provided the following information pertaining to the protective clothing and equipment:

- Proper use, maintenance, and storage.
- Benefits and limitations.
- Each employee will be checked for proper fit and to see if they are medically capable of wearing the equipment.
- When the protective clothing and equipment are to be used.
- When and how the protective clothing and equipment are to be replaced.

All safety equipment must meet National Institute of Occupational Safety & Health (NIOSH) or American National Standards Institute (ANSI) standards and will carry markings, numbers, or certificates of approval. Respirators will meet or exceed NIOSH and California Department of Health and Human Services Standards. Table 5.16-2 includes basic protective equipment that will be used during plant operation.

5.16.2.2.6 Chemical Handling Systems

As described in Section 3.3.4.6, there will be several chemicals stored and used during construction and operation of the SSU6 Project. The storage and handling of chemicals will follow applicable LORS to minimize risk to workers. Chemicals will be identified and stored in

appropriate chemical storage facilities. Bulk chemicals will be stored in aboveground storage tanks; other chemicals will be stored in their delivery containers. Chemical storage and chemical feed areas will be surrounded by temporary or permanent containment or curbing to contain leaks and spills. The containment areas will be sized to hold an appropriate volume (considering the potential for the local hazard contingencies) as designated by a California registered Professional Engineer.

Safety showers and eyewash stations will be provided in or adjacent to chemical storage and use areas, including the hydrochloric acid solution storage area, in accordance with 8 CCR 5162 requirements. Typical safety gear for chemical exposure will be provided in a readily available location for use during minor chemical spill containment and cleanup activities by plant personnel. Adequate supplies of absorbent material and neutralizing agents will be stored on site for minor spill cleanup. A hazardous material emergency response team, trained in the containment control and clean-up of accidental chemical releases, will be available through contract. Emergency contact numbers will be available to summon assistance from these contractors and for notification of local agencies. These procedures will be detailed in the plant operations manual prior to commencement of operations.

The primary chemical exposure concerns are anticipated to be H₂S that naturally occurs from the geothermal source, inorganic arsenic that can potentially build up in the scale created from the steam, hydrochloric acid used in the brine handling, and benzene that could come from the geothermal source and would concentrate in the carbon absorption abatement system.

The LO-CAT H₂S abatement system will minimize the risk of worker exposure to H₂S emissions from routine operations. During commissioning and startup, and during outages and upset conditions, steam may be routed through the steam vent tank system uncontrolled. Although emissions of hydrogen sulfide are anticipated to be higher when routed through the steam vent tank (versus through the turbine and control system), the concentrations at the worker level are still expected to be below applicable worker exposure standards including the Immediately Dangerous to Life and Health limit of 100 ppm and National Institute of Occupational Safety and Health Ceiling Limit of 10 ppm. Hydrogen sulfide sensors placed in the area of the steam vent tank will be used to identify any exceedances of these standards. Procedures addressing employee exposure, response and evacuation shall be included in the Emergency Action Plan (see below).

Inorganic arsenic exposure potential will be most likely during outages and other maintenance and repair activities that require exposing surfaces that have been subjected to steam. Worker monitoring will be used to establish the exposure levels and, if necessary, any mitigating measures to be taken to protect the workers pursuant to 8 CCR 5214. Benzene exposure potential is anticipated to be greatest during the handling of spent carbon absorption drums; however, it is currently anticipated that a service vendor will provide any servicing requiring intimate contact with these drums.

A chemical spill response team shall be established to handle immediate responses to accidental chemical releases (e.g., leakage of hydrochloric acid). This team shall be qualified and trained in compliance with 8 CCR 5192, Hazardous Waste Operations and Emergency Response.

5.16.2.2.7 Emergency Action Plan

In addition to the incorporation of various safety and environmental features and design measures to minimize emergencies and their effects on public and worker safety, the SSU6 Project will have a site specific Emergency Action Plan. A sample Emergency Action Plan outline is provided in Table 5.16-3. The Emergency Action Plan addresses potential emergencies, including chemical releases, fires, bomb threats, pressure vessel ruptures, and other catastrophic events. It describes evacuation routes, alarm systems, points of contact, assembly areas, responsibilities, and other actions to be taken in case of an emergency. The plan has a layout map, a fire extinguisher list, and describes arrangements with local emergency response agencies for responding to emergencies. The Emergency Action Plan will be used in conjunction with the IIPP.

5.16.2.2.8 Fire Prevention Plan

Fire protection at the SSU6 Project will include measures relating to safeguarding human life, preventing personnel injury, preservation of property, and minimizing downtime because of fire or explosion (National Safety Council, 1992). These measures shall be described in a Fire Prevention Plan as required by 8 CCR 3221. It will principally involve physical arrangements, such as sprinkler systems, firewater pump, water supplies and fire extinguishers. Fire protection measures will include fire prevention measures to prevent the inception of fires. Of concern are adequate exits, fire-safe construction, reduction of ignition sources, and control of fuel sources.

The SSU6 facility will become the fire protection responsibility of the Imperial County Fire Department (however, Imperial County contracts fire department response services to the Calipatria City Fire Department). The fire suppression systems will be subject to review and approval by the Imperial County Fire Department, which will have final approval responsibility. Additionally, facilities will be designed by a California Registered Fire Protection Engineer and fire protection equipment will be installed and maintained in accordance with applicable NFPA standards and recommendations (NFPA, 1994).

The Imperial County Fire Department will have the responsibility to perform the final inspection of the SSU6 facility when construction is complete and periodic fire and life safety inspections thereafter, including reviewing and approving programs for regular equipment inspections and servicing and for the training of employees in fire protection procedures. Additionally, the project's insurance carrier will provide annual inspections by a fire protection specialist. A licensed contractor will conduct servicing of the fixed CO₂ or dry chemical systems.

The comprehensive onsite fire protection system and procedures will be designed and implemented to protect both personnel and property. A Program Fire Protection Station Order will be developed to address:

- Names and/or job titles of those responsible for maintaining equipment and control of accumulation of flammable or combustible material.
- Fire fighting demonstrations.
- Housekeeping practices.
- Training.

- Procedures in case of fire.
- Fire alarm and protection equipment.
- System and equipment maintenance.
- Monthly inspections.
- Annual inspections.

5.16.2.2.9 Fire Suppression

The following fire suppression systems are proposed:

- **Handcart Carbon Dioxide Extinguishers.** A carbon dioxide extinguisher system will be provided for the turbine area, as necessary for specific hazards.
- **Fire Hydrants/Hose Stations.** This system will supplement the plant fire protection system. Water will be supplied from the Imperial Irrigation District (IID) canal water system. These will be located consistent with fire design code requirements and with 75-foot hoses.
- **Sprinkler System.** An automatic sprinkler system will provide protection to the turbine generator and auxiliary equipment areas; an automatic spray system will provide protection for the main step-up transformer; an automatic wetdown system will be used to keep the tower structure moist when the plant is shutdown; and automatic sprinklers will protect other administration areas.
- **Smoke Detectors, Combustible Gas Detectors, and Fire Extinguishers.** These will be provided at all locations having potential fire hazards because of the presence of combustible liquids, solids, or other highly flammable materials, and where major property damage could result. Detection system and fire alarm pull stations will be provided in the Control Room and other appropriate areas in accordance with NFPA 72. Extinguishers will be located consistent with the California Building Code at approved intervals throughout the facility as directed by the local fire inspector and selected for the appropriate class of service.

Water will be used as the primary extinguishing agent. The IID water system will be the primary supply of water to the fire suppression systems, with a firewater tank reserve capacity of 300,000-gallon. Chemical and gas extinguishing agents (permanently installed or in portable extinguishers) will be provided in special hazard areas where water would be ineffective or harmful to the equipment being protected.

5.16.3 Cumulative Impacts

The cumulative impacts to worker safety when considering other projects are insignificant. During the construction phase of the project, construction workers are assumed to be employed either on this project or another project; however, the construction workers would not be working at two sites simultaneously, regardless of the geographical proximity of a competing project.

During operations, workers employed with the SSU6 facility would not be working at nearby projects at the same time. Therefore, the cumulative impacts to worker safety considering other

projects would be a matter of the additional workers employed at the SSU6 facility that would not otherwise be employed in the region.

5.16.4 Mitigation Measures

Environmental consequences related to worker safety are not foreseen, therefore additional measures beyond those described herein are not necessary. The described programs are designed to minimize the safety risks to workers. No significant unavoidable adverse impacts to worker safety are anticipated from the proposed project.

5.16.5 Applicable Laws, Ordinances, Regulations, and Standards

To assist in compliance with worker safety LORS, the written worker safety programs will be provided to the CEC and Cal-OSHA for approval before obtaining the facility construction permit. Thereafter, self-auditing of worker safety programs, including contractor safety programs, will be performed as required by the regulations. Additionally, periodic audits by an independent third party (e.g., workers compensation insurance carrier) will be conducted to assist with worker safety.

The following LORS are applicable or potentially applicable to the proposed SSU6 Project in the context of the occupational safety and health protection measures. A summary of the LORS is provided on Table 5.16-4 and agency contacts are provided on Table 5.16-5. Other LORS serving generally to promote worker and public safety and health are identified within Section 5.14, Hazardous Materials Handling, and Section 5.15, Public Health.

5.16.5.1 Federal Authorities and Administering Agencies

Occupational Safety and Health Act of 1970, 29 USC §667; 29 CFR 1952.170-175. The Federal Occupational Safety and Health Administration (Fed-OSHA) has the authority to approve State Plans for the protection of worker health and safety. To be granted approval, the State Plan must meet requirements that are at least as stringent as the Federal OSHA requirements in protecting worker health and safety.

Under the Operational Status Agreement of October 5, 1989 between the Fed-OSHA and the California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH), the state resumed full enforcement responsibility for most of the relevant federal standards and regulations, (55 Fed. Reg. 18610 (July 12, 1990); 29 CFR §1952.172).

In essence, the administration and enforcement of worker safety at the SSU6 facility would be at the State level under Cal-OSHA. The general coverage of these requirements is discussed below.

5.16.5.2 State Authorities and Administering Agencies

In general, certifications, permits, plans and procedures would be prepared and training would be conducted for construction and operations of the SSU6 facility to comply with Cal-OSHA requirements, described below. Additional details of specific programs, codes and requirements potentially applicable to the SSU6 facility are included in Table 5.16-6.

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California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 1 (Unfired Pressure Vessel Safety Orders). These regulations govern the design, construction, installation and operation of unfired pressure vessels, including compressed air tanks, ammonia tanks, LPG and LNG tanks. Cal-OSHA is the enforcing agency for these requirements. The administering agency for the above regulation is Cal-OSHA.

California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 4 (Construction Safety Orders). These regulations cover standards and requirements specific to construction activities. Major health and safety provisions for the SSU6 Project construction include programs and procedures to address IPPs, crane and hoist usage, fall protection, and high voltage construction. The administering agency for the above regulation is Cal-OSHA.

California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 5 (Electrical Safety Orders). These regulations cover standards and requirements specific to the design, installation and use of both High Voltage and Low Voltage systems. The administering agency for the above regulation is Cal-OSHA.

California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6 (Elevator Safety Orders). These regulations cover standards and requirements for the design, installation and operation of elevators in the State of California (except those under U.S. government jurisdiction or certain private residential properties). The administering agency for the above regulation is Cal-OSHA.

California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 7 (General Industry Safety Orders). These regulations provide standards and requirements to protect all worker activities, unless specifically exempted. Some of the major health and safety provisions anticipated for the SSU6 Project include programs and procedures to address IPPs, Hazard Communication, Noise, Respiratory Protection, Personal Protective Equipment, airborne contaminant exposures (specific potential exposure concerns for benzene, arsenic and hydrogen sulfide), Emergency Action and Fire Prevention, machine guarding, crane and hoist operation, control of energized sources and confined space entry. The administering agency for the above regulation is Cal-OSHA.

California Health and Safety Code §25500 to 25541; 19 CCR §§2720-2734. This code establishes inventory, reporting, business, and area planning requirements with respect to hazardous and acutely hazardous materials in accordance with the federal Emergency Planning and Community Right-to-Know Act of 1986. Generally, it requires that any business that handles a hazardous material or mixture in amounts greater than specified thresholds, must establish and implement a business plan for emergency responses to a release or threatened release of the hazardous material or mixture.

The administering agencies for the above regulation are the California Office of Emergency Services and the Imperial County Environmental Health Services (as the Designated Agency).

Prior to the storage of hazardous materials on site, the SSU6 Project would prepare a Hazardous Materials Business Plan.

California Health and Safety Code §25404; Title 27 §§15160(b), 151100(g) and 151100(b). This code requires that a business submit a Hazardous Materials Management Plan (HMMP) and

Hazardous Materials Inventory Statement pursuant to the Uniform Fire Code (see below). The administering agencies for the above regulation are the California Office of the Fire Marshall and the Imperial County Fire Department.

Prior to the storage of hazardous materials on site, the SSU6 Project would prepare an HMMP and Inventory Statement.

5.16.5.3 Local Authorities and Administering Agencies

Uniform Fire Code, Article 80, 79, 4. The article includes provisions for storage and handling of hazardous materials. Considerable overlap exists between this code and the Health and Safety Code §25500 to 25541. However, the fire code does contain independent provisions regarding fire protection and neutralization systems for emergency venting (§80.303, D, Compressed Gases). Other articles that may be applicable include Article 4, Permits, and Article 79, Flammable and Combustible Liquids.

The administering agency for the above regulation is the Imperial County Fire Department.

The SSU6 Project would be designed and constructed to comply with all applicable Uniform Fire Code requirements.

National Fire Protection Association. Prescribes minimum requirements necessary to establish a reasonable level of fire safety and property protection from the hazards created by fire and explosion. Table 5.16-7 summarizes the NFPA standards that are potentially applicable to the SSU6 Project. The standards apply to the manufacture, testing and maintenance of the equipment.

The administering agency for the above regulation is the Imperial County Fire Department.

The SSU6 Project would be designed and constructed to comply with all applicable NFPA requirements.

California Code of Regulations, Title 24, Section 501 et seq.; California Building Code. This regulation specifies the relevant building codes required by the State of California for the design and construction of buildings related to fire and life safety, and structural safety. By incorporation, this regulation references requirements of the 1997 Uniform Building Code (UBC). The Imperial County Planning and Building Department, who enforce these provisions, use the 1998 California Building Codes, 1997 UBC and the 1996 National Electric Code as its guidance.

5.16.5.4 Industry Codes and Standards

Several industry codes and trade association standards exist that may be applicable to the SSU6 to assure worker safety and health. Table 5.16-8 provides a listing of potentially applicable industry codes and standards. Typically, the codes and standards are requirements for the manufacturers of the facility equipment.

SECTION FIVE**5.16.6 References**

- Caeser. Calipatria City Fire Department, 175 North Park Avenue, Calipatria, CA 92233 (760-348-4144). Personal communication with R. Chan, URS Corporation, January 15, 2002.
- California, State of, Division of Occupational Safety and Health. *Requirements for: Permits, Registrations, Certifications and Notifications*. Director of Industrial Relations, December 2001.
- Dosch, M.W., and Hodgson, S.F. *Drilling and Operating Oil, Gas, and Geothermal Wells in an H₂S Environment*. State of California, Division of Oil, Gas, and Geothermal Resources, Publication No. M10, Sacramento, 1997.
- Hettinger, Captain Lon. Imperial County Fire Department, Fire Prevention, 2514 La Brucherie Road, Imperial, CA 92251 (760-355-1191). Personal communication with R. Chan, URS Corporation, January 14, 2002.
- National Fire Protection Association. 1994. *A Compilation of NFPA Codes, Standards, Recommended Practices and Guides*. Quincy, Massachusetts.
- National Safety Council. 1992. *Accident Prevention Manual*. Volume 2, Chapter 6, Fire Protection.
- Stillwell, Jerry. Imperial County Planning and Building Department, 939 W. Main Street, Suite B1, El Centro, CA 92243 (760-482-4236). Personal communication with R. Chan, URS Corporation, February 7, 2002.
- Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 1. "Unfired Pressure Vessel Safety Orders."
- Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 4. "Construction Safety Orders."
- Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 5. "Electrical Safety Orders."
- Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 6. "Elevator Safety Orders."
- Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 7. "General Industry Safety Orders."

**Table 5.16-1
POTENTIAL WORKER HAZARDS DURING FACILITY
CONSTRUCTION AND OPERATION**

Activity	Potential Hazard
Facility Construction	
Drilling/Well Installation	Slips/trips/falls, entanglement, toxic (H ₂ S) gas, thermal burns, falling objects, fire
Elevated work	Slips/trips/falls, falling objects
Welding	Flash burns, explosion, thermal burns, toxic welding fumes
Excavations	Excavation/trench wall collapse, spoil movement, oxygen deficiency, buildup of toxic gases, fumes, vapors, dusts or mists, wet exposures, crushing hazards, confined spaces, soil contamination exposure
Cement/forms work	Slips/trips/falls, protruding objects, caustics, punctures, lacerations
Equipment operation	Noise exposure, vehicle accidents, load hazards, falling objects, induced current
Transmission lines/transformer station	Slips/trips/falls, electrocution, flash burns
Painting	Paint solvents, paint vapors and fumes, chemical burns, fire/explosion, slips/trips/falls
Abrasive blasting	Dust, flying particles, pressure vessels, noise
Powered hand tools	Noise, dust, flying particles, cuts, amputation, crushing
Material handling	Back injuries, pinch points
Fueling	Fire and explosion, environmental contamination
Non-specific	Heat stress
Facility Operations	
Generation enclosure	High voltage
Operations building	High voltage, repetitive trauma, confined space
Cooling unit	Slips/trips/falls, noise, wet exposure, chemical exposure, biological exposure
Transformer	Electrical (e.g., electrocution and flash burns)
Compressed gas storage	Fire and explosion
Chemical storage	Chemical splashes, burns, reactions, gases, vapors, fumes
Chemical spill response	Chemical splashes, burns, reactions, gases, vapors, fumes
Material handling	Back injuries, pinch points
Machinery, general	Noise, temperature extremes, rotating equipment, electrocution
General Maintenance/Repairs	Confined spaces, energized sources, noise, gases, vapors, fumes, metals
Non-specific	H ₂ S gas, noise

**Table 5.16-2
BASIC PROTECTIVE EQUIPMENT GUIDE**

Body Area	Hazards	Recommended Protection
Eyes/Face	Low-velocity flying particles	Safety glasses with side shields
	High-velocity chips and sparks	Impact goggles or safety glasses with full face shield
	Corrosive liquid splash during transfer	Splashproof goggles and face shield
	Entering an acid storage system	Acid hood
	Welding - injurious light rays	Welding hood with appropriate eye filter lenses
Head/Ears	General wear, overhead rigging, material handling, maintenance and general construction operations	Hard hat (non-conductive)
	Noise exposure	Ear plugs or muff
Respiratory System	Low-hazard inert dusts	Particulate-filtering respirator ¹
	Welding fumes	Welding fume respirator (along with appropriately ventilated area) ¹
	Low concentration solvent vapors	Cartridge-type organic vapor respirator ¹
	Acid mists	Cartridge-type acid mist respirator ¹
	High-concentration dusts or vapors	Air line respirator ¹
	Oxygen deficiencies or gases	Self-contained breathing apparatus ¹
Hands and Arms	Handling rough or sharp objects	Leather gloves
	Handling hot objects, Welding	Insulated gloves
	Using solvents	Impervious synthetic gloves
Feet and Legs	General wear for light handling	Safety toe shoes
	Handling heavy objects	Metatarsal safety shoes
	Using brush hooks or scythes	Shin guards
	Working with corrosive liquids	Chemically protective safety toe boots, no leather, no breather holes
Trunk and Full Body	Hot or corrosive liquids	Full body suit made of appropriate chemically protective materials
	Punctures, impact, or cuts	Canvas or leather kickback apron or metal mesh apron
	Welding	Welding apron (fire resistant)
	Clean-up of broken acid containers	Full body suit made of appropriate chemically protective materials
Fall Protection/ Rescue	Working from elevated structure of platform without standard railings	Safety harness and lanyard
	Vessel entry	Harness and lifeline or wristlets and lifeline
	Suspended scaffolds	Lifeline, safety harness/lanyard

¹ Only NIOSH-approved respirators for the identified hazards shall be used pursuant to 8 CCR 5144

**Table 5.16-3
SAMPLE EMERGENCY ACTION PLAN OUTLINE**

<p>Introduction</p> <p>1.1 Purpose</p> <p>1.2 Scope</p> <p>2.0 Responsibilities</p> <p>2.1 Incident Command System Emergency Response Coordinator Emergency Evacuation Coordinator Safety Coordinator and Alternates</p> <p>2.2 Position Description Assignments Construction/Facility Manager Construction/Facility Supervisor Operators Health and Safety Manager Security</p> <p>3.0 Response and Notification Plan (Points of Contact)</p> <p>3.1 Supervisor/Emergency Coordinator</p> <p>3.2 Health and Safety Manager</p> <p>4.0 Response Procedures</p> <p>4.1 Evacuation Routes and Procedures</p> <p>4.2 Accidents Involving Serious Injury and/or Death</p> <p>4.3 Fire</p> <p>4.4 Hazardous Waste or Chemical Releases</p> <p>4.5 Earthquake</p> <p>4.6 Bomb Threat</p> <p>4.7 Emergency Plant Shutdown</p> <p>4.8 Site Security</p> <p>4.9 Emergency Medical Treatment and First Aid</p> <p>4.10 Decontamination</p> <p>4.11 Documentation and Recordkeeping</p> <p>4.12 News Media</p> <p>4.13 Emergency Notification List</p> <p>4.14 Emergency Telephone Numbers List</p>	<p>5.0 Reference Procedures</p> <p>5.1 Evacuation Plan</p> <p>5.2 Emergency Equipment Locations</p> <p>5.3 Fire Extinguisher Locations</p> <p>5.4 Security</p> <p>5.5 Accident Reporting and Investigation</p> <p>5.6 Lockout/Tagout</p> <p>5.7 Hazard Communication</p> <p>5.8 Spill Containment and Reporting</p> <p>5.9 First Aid and Medical Response</p> <p>5.10 Respiratory Protection</p> <p>5.11 Personal Protective Equipment</p> <p>5.12 Sanitation</p> <p>5.13 Work Site Inspections</p>
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**Table 5.16-4
SUMMARY OF LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

Jurisdiction	LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
5.16 Worker Safety and Health Protection					
Federal					
	Occupational Health & Safety Act of 1970, 29 USC 667:29 CFR 1952.170-175.	Provides California the authority to enforce its own Occupational Safety and Health standards and regulations under an approved California State Plan.	Section 5.16.5.1	Fed-OSHA	1
State					
	California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 1 (Unfired Pressure Vessel Safety Orders)	Meet requirements for a safe and hazard-free working environment during the design, installation and operation of unfired pressure vessels.	Section 5.16.5.2	Cal-OSHA	2
	California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 4 (Construction Safety Orders)	Meet requirements for a safe and hazard-free working environment during construction activities.	Section 5.16.5.2	Cal-OSHA	2
	California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 5 (Electrical Safety Orders)	Meet requirements for a safe and hazard-free working environment during installation and work on electrical systems.	Section 5.16.5.2	Cal-OSHA	2
	California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 5 (Elevator Safety Orders)	Meet requirements for the design, installation and operation of elevators in the workplace	Section 5.16.5.2	Cal-OSHA	2
	California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 7 (General Industry Safety Orders)	Meet requirements for a safe and hazard-free working environment during general work activities not explicitly exempted.	Section 5.16.5.2	Cal-OSHA	2
	California Health & Safety Code, §25500 to 25541; 19 CCR §§2720-2734	Requires a business plan for emergency responses to a release or threatened release of hazardous material or mixture.	Section 5.16.5.2	California Office of Emergency Services and Imperial County Environmental Health Services	3, 5

**Table 5.16-4 (continued)
SUMMARY OF LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

Jurisdiction	LORS	Requirements	Conformance Section	Administering Agency	Agency Contact
State (continued)					
	California Health & Safety Code, § 25404; 27 CCR §§ 15160(b), 15100(g), 15100(b)	Requires a Hazardous Materials Management Plan and Inventory.	Section 5.16.5.2	California Office of the State Fire Marshal and Imperial County Fire Department	4, 6
Local					
	Uniform Fire Code, Article 80, 79, 4	Meet requirements for the storage and handling of hazardous materials (Article 80), flammable and combustible liquids (Article 79), and for obtaining permits (Article 4).	Section 5.16.5.3	Imperial County Fire Department	6
	National Fire Protection Association (See Table 5.16-3 for list of standards)	Meet standards necessary to establish a reasonable level of safety and property protection from the hazards created by fire and explosion.	Section 5.15.5.3, Public Health; Section 5.16.5.3	Imperial County Fire Department	6
	California Building Code, California Code of Regulations, Title 24, Section 501 et seq.	Meet building design and construction standards relating to fire and life safety, and structural safety.	Section 5.16.5.3	Imperial County Planning and Building Department	7
Industry Codes and Standards					
	Various	Industry codes and trade association standards are typically requirements of the manufacturers of equipment - see text (7.4.2.4) for partial listing.	Section 5.16.5.4	Various	NA

**Table 5.16-5
AGENCY CONTACT LIST FOR
LAWS, ORDINANCES, REGULATIONS, AND STANDARDS**

FEDERAL					
1	U.S. Department of Labor Directorate of Federal-State Operations (OSHA) – Room N3700 200 Constitution Avenue Washington, D.C. 20210 Paula O. White 202.693.2200				
STATE					
2	California Occupational Safety and Health Administration 7575 Metropolitan Drive, Suite 207 San Diego, CA 92108 Luis Morales 619.767.2280	3	California (Governor's) Office of Emergency Services P.O. Box 419047 Rancho Cordova, CA 95741-9047 Tom Mullins Eric Lamoureux Sheryl Tankersley Dale Chessey 916.845.8743	4	State of California Office of the State Fire Marshal 1131 "S" Street Sacramento, CA 95814 John J. Tennant 916.445.8200
LOCAL					
5	Imperial County Environmental Health Services Hazardous Materials Division 939 W. Main Street, Courthouse B7 El Centro, CA 92243 Mr. Nick Del Valle 760.482-4203	6	Imperial County Fire Department Fire Prevention 2514 La Brucherie Road Imperial, CA 92251 Captain Lon Hettinger 760.355.1191	7	Imperial County Planning and Building Department 939 W. Main Street, Suite B1 El Centro, CA 92243 Mr. Jerry Stillwell 760.482.4236

**Table 5.16-6
POTENTIALLY APPLICABLE OCCUPATIONAL SAFETY AND
HEALTH TOPICS PRESCRIBED BY TITLE 8 CCR**

Standard	Description
Occupational Safety and Health Standards 401 – 428	
	Definitions and Administration
	Variations
	Appeals
	Officers
	Hearing Board
Unfired Pressure Vessel Safety Orders, Sections 450-560	
	Design and Construction
	Air Tanks
General Construction Safety Orders, Sections 1500-1938	
	High Voltage Electrical Safety Orders Construction Accident Prevention Plan
	Injury and Illness Prevention Program
	Hoist Equipment
	Reinforcing Concrete
	Fall Protection and Scaffolding
	Electrical Installations
	Evacuation Plan and Procedures
	Fire Safety
	Airborne Contaminants
	Emergency Medical Procedures
	Personal Protective Equipment
	Hand and Power Tool Use
	Crane and Hoist Operation
	Pile Driving
Elevator Safety Orders, Sections 3000-3139	
	Application and Permit to Operate
	New Elevator Installations
General Industry Safety Orders, Sections 3200-6184	
	Employee/Employer Communications Injury and Illness Prevention Program
	Emergency Action Plan Fire Prevention Plan
	Hazardous Materials
	<ul style="list-style-type: none"> • Control of Hazardous Substances • Hazard Communication
	Hazard Communication
	Emergency Medical Procedures

**Table 5.16-6 (continued)
POTENTIALLY APPLICABLE OCCUPATIONAL SAFETY AND
HEALTH TOPICS PRESCRIBED BY TITLE 8 CCR**

Standard	Description
General Industry Safety Orders, Sections 3200-6184 (continued)	
	Personal Protective Equipment
	Airborne Contaminants
	Signs, Tags, Barriers
	Noise Levels
	Confined Space Entry
	Control of Hazardous Energy (Lockout/Tagout)
	Ventilation
	Flammable/Combustible Materials Handling and Storage
	Fire Protection Systems
	Machine Guarding
	Crane and Hoist Operation
	Heavy Equipment and Machine Operation
	Rigging
	Sanitary Facilities
	Traffic Safety
	Interface with other Contractors
	Miscellaneous Hazards, including hot pipes, compressed air system, relief valves, pipelines, loading docks.

**Table 5.16-7
NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS
RELATED TO FIRE AND EXPLOSION HAZARDS**

Standard	Description
NFPA 1	Fire Prevention Code
NFPA 10	Portable Fire Extinguishers
NFPA 12	Carbon Dioxide Extinguishing Systems
NFPA 13	Installation of Sprinkler Systems
NFPA 14	Installation of Standpipe and Hose Systems
NFPA 15	Water Spray Fixed Systems
NFPA 20	Centrifugal Fire Pumps
NFPA 22	Water Tanks for Private Fire Protection
NFPA 24	Private Fire Service Mains and Their Appurtenances
NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
NFPA 30	Flammable and Combustible Liquids Code
NFPA 37	Combustion Engines and Gas Turbines
NFPA 50A	Gaseous Hydrogen Systems at Consumer Sites
NFPA 68	Explosion Venting
NFPA 69	Explosion Preventing
NFPA 70	National Electric Code
NFPA 72	National Fire Alarm Code
NFPA 78	Lighting Protection Systems
NFPA 291	Testing and Marking Hydrants
NFPA 496	Purged and Pressurized Enclosures for Electrical Equipment
NFPA 497	Flammable and Combustible Liquids Classification
NFPA 1961	Fire Hose
NFPA 1962	Care, Use and Service Testing of Fire Hose Including Couplings and Nozzles
NFPA 1963	Screws, Threads, and Gaskets for Fire Hose Connections
NFPA 2001	Clean Agent Fire Extinguishing Systems

Table 5.16-8
POTENTIALLY APPLICABLE INDUSTRY CODES AND STANDARDS

American Association of State Highway Officials (AASHO)
American National Standards Institute (ANSI)
American Petroleum Institute (API)
American Society for Testing and Materials (ASTM)
American Society of Nondestructive Testing (ASNT)
American Society of Mechanical Engineering (ASME)
American Water Works Association (AWWA)
American Welding Society (AWS)
Underwriters Laboratories (UL)
Uniform Building Code (UBC)
Uniform Fire Code (UFC)
Standards of Tubular Exchanger Manufacturers Association (TEMA)
American Institute of Steel Construction (AISC) Specifications
American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)
Asphalt Institute, Pacific Coast Division
California State Fire Marshall (CSFM)
Heat Exchanger Institute
Hydraulic Institute Standards
Institute of Electrical and Electronic Engineers (IEEE)
Instrument Society of America (ISA)
National Association of Corrosion Engineers (NACE)
California Building Code (CBC)
Steel Structures Painting Council Standards (SSPC)
Uniform Plumbing Code (UPC)
Uniform Mechanical Code (UMC)