**September 4, 2014**

**Commercial Fire Safety Plan**

**Project Summary**

Name:       Project Number: **#-**

Street Name:      City: State:  Zip:

Project Description:       Phone #: (     )     -

This project is located approximately  minutes from the closest CAL FIRE/San Luis Obispo County Fire Station. The project  located in State Responsibility Area for wild land fires, and designated as a  Fire Hazard Severity Zone. This project is required to comply with all fire safety rules and regulations including the California Fire Code, the Public Resources Code and any standards referenced therein.

**OPERATIONAL REQUIREMENTS**

**Special Concerns**

This project has an extended fire engine response time of over       minutes where emergency services are not readily available. The cumulative effects of large scale special events and increased commercial operations within areas such as this continue to place challenges upon CAL FIRE/County Fire’s ability to provide emergency services within rural areas.

Of specific concern to CAL FIRE/County Fire, is the numerous “poly” water storage being utilized to meet the water storage demands of the existing on site fire protection system(s), The Registered Fire Protection Engineer shall provide his/her professional input as to whether or not this condition satisfies the requirements of N.F.P.A 13 (Installation of Sprinkler Systems), N.F.P.A 1142 (Water Supplies for Suburban and Rural Firefighting), CA. Fire Code Appendix B/BB (Fire Flow Requirements for Buildings), CA. Fire Code Appendix C/CC (Fire Hydrant Locations and Distribution) as well as any other applicable laws, codes, standards and regulations.

**Public Assemblage and Events**

Prior to Fire Department Review, proposed event area must first complete all requirements pursuant to Title 22, the San Luis Obispo County Land Use Ordinance. This includes receiving any necessary land use permit approval and issuance of construction and Conditional Use Permit requirements.

A fire safety review is required to ensure public safety in a place of assembly, or any other place where people congregate, including but not limited to; amusement buildings, carnivals and fairs, exhibits and trade shows, open burning, flames and torches, candles, places of assembly, temporary membranes structures and tents, pyrotechnics and special effects, live audiences and any event with public attendance over 250. The fire code official shall have the authority to order the development of, or prescribe a plan for, the provision of an approved level of public safety.

A written plan must be submitted to the fire code official 30 days prior to the event. Written submittal requirements will be in accordance with Section 404 Fire Safety and evacuation plans. **A field inspection verifying compliance of fire and life safety conditions must be conducted prior to public occupancy of the event.**  If modifications or additions to the event areas are made, an updated permit & inspection must be completed. Local Ordinance and California Fire Code (CFC) section 105.

Any time a tent, canopy or membrane structure in excess of 400 square feet is erected; it must be placed and utilized in accordance with California Fire Code – Chapter 31. The applicant shall be required to notify County Fire a minimum of 48-hours in advance of any tent or membrane structure being placed on site. Submittal requirements can be found on line at [www.calfireslo.org](http://www.calfireslo.org)

**Additional/Special Conditions**

**Fire Safety and Evacuation Plans**

Applicant shall provide a written Fire Safety plan whose contents shall be in accordance with sections California Fire Code Chapter 4 Emergency Planning and Preparedness. Employee training, record keeping, hazard communication and drills will also comply with this chapter. The written plan will include at a minimum the detail outlined in sections 404.3.1 (Evacuations Plans) and 404.3.2 (Fire Safety Plans).

**Fire Evacuation Plans**

Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete or, where *approved*, by selected floors or areas only.

2. Procedures for employees who must remain to operate cr7itical equipment before evacuating.

3. Procedures for assisted rescue for *persons* unable to use the general *means of egress* unassisted.

4. Procedures for accounting for employees and occupants after evacuation have been completed.

5. Identification and assignment of personnel responsible for rescue or emergency medical aid.

6. The preferred and any alternative means of notifying occupants of a fire or emergency.

7. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.

8. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.

9. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.

**Fire Safety Plans**

Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.

2. The life safety strategy and procedures for notifying, relocating or evacuating occupants/event attendees, including occupants who need assistance.

3. Site plans indicating the following:

3.1. The occupancy assembly point.

3.2. The locations of fire hydrants.

3.3. The normal routes of fire department vehicle access.

4. Floor plans identifying the locations of the following:

4.1. Exits.

4.2. Primary evacuation routes.

4.3. Secondary evacuation routes.

4.4. Accessible egress routes.

4.5. Areas of refuge.

4.6. Exterior areas for assisted rescue.

4.7. Manual fire alarm boxes.

4.8. Portable fire extinguishers.

4.9. Occupant-use hose stations.

4.10. Fire alarm annunciators and controls.

5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.

6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

**Additional/Special Conditions**

**Building Construction requirements and Vegetation Management**

**Vegetation Management**

A written Wildland Fire/Vegetation Management Plan must be developed and approved by CAL FIRE.

**Screening and Environmental Considerations**

Landscaping and vegetation shall be in accordance with San Luis Obispo County Planning and building “screening requirements”. CAL FIRE requires that landscaping selections do not readily transmit fire.

Fire resistant landscaping located within 100 feet of site improvements (structures or fire water tanks) shall be in accordance with CFC, Pubic resources code 4291 and Title 19 Division 1 described as "vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-footperimeter of the structure, the most intense being within the first 30 feet around the structure. Consistent with fuels management objectives, steps should be taken tominimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels. [www.calfireslo.org](http://www.calfireslo.org) website has several links with recommended planning tools for landscape and fuels management plans.

**Ignition Resistant Construction**

Your project is located within a wildland fire hazard severity zone and must comply with California Fire and Building Code Chapter 7A Ignition resistant Construction in Wildland Urban Interface areas. The construction type shall be designed to withstand a wildfire. The roof type will have to be consistent with the requirements of Chapter 15 - Section 1505.

**Stairway Access to Roof**

New buildings two or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a stairway to the roof or other access to the roof for emergency personnel approved by the fire code official. Stairway access to the roof shall be in accordance with Section 1009. Such stairway or other approved access shall be marked at street and floor levels with a sign indicating that the stairway or access continues to the roof. Where roofs are used for roof gardens or for other purposes, stairways shall be provided as required for such occupancy classification.

**Building Height and Area**

Class III standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access and in any parking structure.

A building that is greater than 20,000 square feet (1.858 m2) of floor area and greater than18 feet (5.49 m) in height shall have a dry or wet standpipe system with a 2 ½ inch (64 mm) outlet at the roof near the roof access. Location of the outlet and the fire department connection to the standpipe shall be labeled and approved by the fire code official.

**Address Requirements**

New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be approved in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of  inches high with a minimum stroke width of 0.5 inch (12.7mm).

**Address Directories**

When required by the fire code official, complexes with multiple buildings may be required to provide directories, premises maps and directional signs. The scale, design and location of directory signs shall be approved by the fire code official and may be required to be illuminated.

**Additional/Special Conditions**

**Solar Photovoltaic systems**

Solar systems shall be installed in accordance with sections 605.11.1-605.11.4. Marking is required on interior and exterior Direct Current (DC) conduit, enclosures, raceways, cable assemblies, junction boxes, combiner boxes and disconnects.

Solar components shall be located as close to the hip, ridge, or valley or directly possible to an outside wall to reduce trip hazards and maximize ventilation opportunities.

Roof access points shall be located in areas that do not require the placement of ground ladders over openings such as windows, doors and must be located over strong points where access point does not conflict with overhead obstacles such as trees wires or signs.

There shall be a six (6) foot wide clear perimeter around the edges of the roof unless either axis of the building is 250 feet then 4 (4) foot clear perimeter is permitted. Smoke ventilation operations requires distance between arrays shall be eight foot or greater in width OR a four foot or greater pathway and bordering roof skylights, or smoke and heat vents OR a four (4) foot or greater and a bordering four foot by eight (8) foot “venting cutouts” every 20 feet on alternating sides of the pathway.

**Site Access /Roads/Knox/Exiting**

**Commercial and Residential Access Road Standards**

All road design criteria will meet the San Luis Obispo County Department of Public Works Public Improvement Standards. Standard construction drawing exhibits can be located on line at: <http://www.slocounty.ca.gov/Assets/PW/DevServ/general/2008+Standards.pdf>

**Commercial and Residential Road Grades**

The grade for all roads, streets, private lands and driveways shall not exceed 16 percent unless approved by fire code official. Design criteria shall be in accordance with San Luis Obispo County Public Works public improvement standards. Roads 12%-16% shall be a nonskid asphalt or concrete surface as specified in San Luis Obispo County public improvement Standards, specifications and drawings.

All roads shall:

• Be able to support Fire Apparatus.

• Provide a vertical clearance of 13’6”

• Provide a 10 foot fuel modification zone on both sides.

**Commercial**

The access road must be a minimum of 24 feet in width for two way traffic and shall be constructed to SLO County Public Works Standards. Two (2) 10- foot driving lanes and Two (2) – Two (2) foot shoulders.

Parking is only allowed where an additional 8 feet of width is added to each side of the road to accommodate parking. “No Parking - Fire Lane” signs may be required.

Fire lanes shall be provided as set forth in Chapter 5 of the 2013 California Fire Code.

Fire access shall be provided to within 150 feet of the outside building perimeter.

**Secondary Access Road**

More than one Fire Apparatus access road shall be required when potential for the impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

**Residential Access Roads – (serving more than one legal parcel)**

The road must be named and properly signed according to San Luis Obispo County Planning and Building.  The access road must be a minimum of 24 feet in width for two way traffic and shall be constructed to SLO County Public Works Standards. (2) 10- foot driving lanes and (2) - 2 foot shoulders.

Parking is only allowed where an additional 8 feet of width is added to each side of the road that will require parking.

“No Parking - Fire Lane” signs may be required.

**Secondary Dwelling**

Access road and driveway requirements for an additional dwelling allowed by section 22.10.130 of the LUO must be reviewed by the San Luis Obispo County Planning and Building Department.

**Additional/Special Conditions**

**Driveway Standards**

Driveway specifications shall be provided and maintained when serving no more than one legal parcel or lot with no more than 3 dwelling units, and any number of accessory buildings.

Driveway minimum width in Moderate Fire Hazard Severity zones 10 feet.

Driveway minimum width in High and Very High fire Hazard Severity zones:

• 0-49 feet, 10 feet is required.

• 50-199 feet, 12 feet is required.

• Greater than 200 feet, 16 feet is required.

Turnarounds must be provided if driveway exceeds 300 feet, and shall be within 50 feet of the building. For driveways exceeding 300 feet, a turn-around shall be at the building site and must be within 50 feet of the dwelling.

For driveways exceeding 800 feet, turnouts shall be provided no more than 400 feet apart. Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway.

A turnout shall be provided near the midpoint and shall be a minimum of 10 feet wide and 30 feet long with a minimum 25 foot taper on each end.

**Dead-End Road**

A dead-end road has only one point of vehicular ingress/egress, including cul-de-sacs and looped roads.

The maximum length of a dead end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:

• Parcels less than 1 acre 800 feet

•Parcels 1 acre to 4.99 acres 1320 feet

• Parcels 5 acres to 19.99 acres 2640 feet

• Parcels 20 acres or larger 5280 feet

A turnaround must be provided if the dead end road exceeds 150 feet.

**One-Way Road**

When allowed, one-way roads serving residential use only shall be constructed to provide a minimum of one 10-foot traffic lane.

All one-way roads shall connect to a two-lane roadway at both ends, and shall provide access to an area currently zoned for no more than 10 dwelling units. In no case shall it exceed 2,640 feet in length.

A turnout shall be placed and constructed at approximately the midpoint of each one-way road.

**Bridges**

Commercial, subdivision and bridges on access roads must meet the standards outlined by Caltrans for bridge designs on public roads. Additional design criteria and information may be obtained from San Luis Obispo County Public Works. San Luis Obispo County Public Works defers to Cal Trans standards.

Caltrans link is:

<http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-design-specifications/bds.html>

Private bridges must meet the following requirements:

• Be designed by a Registered Civil Engineer.

• Engineer must provide written design load and specifications to CAL FIRE/County Fire.

• Bridge weight limit and vertical clearance signs posted at each entrance.

• Provide a minimum of 20 ton capacity.

• Provide vehicle & pedestrian guard rails on each side.

• Provide turnouts on either side of bridge entry.

•One lane bridges must be approved by the fire department.

**Additional/Special Conditions**

**Emergency Access Knox Keys and/or Gate Switches**

**Structural Access Requirements**

All commercial buildings shall install a Knox key box for fire department emergency access – CFC Section 506.1. The box shall be installed prior to final inspection of the building. An order form is available from the Prevention Bureau, call for more information at (805) 543-4244.

**Gate Access Requirements**

Gate must be setback a minimum of 75 feet from the SLO County maintained road.

Gate must automatically open with no special knowledge.

Must have a KNOX key box or switch for fire department access. Call the Prevention Bureau for an order f orm at (805) 543-4244.

Gate shall have an approved means of emergency operation at all times. CFC 503.6

Gate must be 2 feet wider than the road on each side.

Gates must have a turnaround located at each gate.

**Exiting**

All egress and exiting components shall comply with Chapter 10 of the 2013 California Fire Code.

**Setbacks**

A 30-foot building setback from property line required for parcels 1 acre in size or larger.

**Fire Protection Systems Sprinklers Hydrants Alarms**

**Fire Sprinklers in Structures**

This project will require installing a commercial fire sprinkler system in all new buildings. The type of sprinklers required will depend upon the occupancy classification type of the structures and must comply with NFPA 13. The automatic fire extinguishing system shall comply with the National Fire Protection Association (NFPA) 13. The applicant will have to identify what Hazard Class the project is for review by the fire department (exp. Ordinary Hazard Class II), for each of the buildings in the project. Three sets of plans and calculations shall be submitted for functional review and approval to the County Fire Department. The contractor shall be licensed by the State of California, CFC. A licensed alarm company shall monitor the fire sprinkler and alarm system.

The automatic fire extinguishing system shall comply with the National Fire Protection Association (NFPA) 13, or other approved NFPA Standard depending on target hazard. (Clean agent or alternative option)

Structures over the minimum square footage must meet **all of the local ordinance** table 903 requirements **and all of the following requirements**:

No conditioned or habitable space

No second stories (lofts 1/3 the floor area and open to below are allowed)

Minimum two exits including one pedestrian door (side hinge swinging door)

Workshops or offices limited to 10% of floor area

Dedicated fire water storage minimum of 5,000 gallons steel tank in full compliance with NFPA 1142(see fire safety plan) if there is no community provided fire hydrant within 500 ft.

Structure complies with the California Wildland Urban-Interface Ignition Resistant Construction Requirements

Heat detectors installed in accordance with CBC linked to an audible bell mounted in the exterior of the structure.

Cannot be used as a place of employment or for public assemblage/events

Cannot be used as a commercial building

**Hydrants**

All fire hydrants and required access roads shall be installed PRIOR to structural construction.

**Tenant Improvements**

Tenant Improvement requiring a Fire Safety Plan and alternations to an existing Sprinkler system must also provide a letter and/or a review from a Fire Protection Engineer verifying the fire and life safety function of the installed system.  Examples of thresholds for alterations requiring FPE review include walls moved, removed or new walls installed.  Occupancy change, hazard class change and or additional heads added to system.

**Additional/Special Conditions**

**Multiple Tanks**

Daisy chaining of tanks is prohibited.

**Exception**: When topographical or soil conditions prohibit large tanks (technical report required) and/or Planning and Building Department land use conditions require reduced visual impact reduction (Coastal Zone screening) and where approved by the fire chief multiple tanks may be installed.   Multiple tanks systems must: all valves must be chained and locked open, each tank must be installed with monitored tamper resistance, and all tanks must feed into one common manifold serving the fire protection systems and on site hydrants or other appurtenances.

**Sprinkler System Supervision and Alarms**

All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels, and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically monitored for integrity and to ensure valves are locked in the open position, by a central station listed by Underwriters Laboratories for receiving fire alarms.

**Fire Protection Engineer required**

A Fire Protection Engineer shall review the proposed Fire Protection Systems for this project. Multiple fire protection and hazardous conditions systems are required for this project. A list of Fire Protection Engineers is available on our website at http://www.calfireslo.org.

Three sets of plans and calculations shall be submitted for functional review and approval to the County Fire Department. A licensed Fire Protection Engineer must design and submit all required drawings for CAL FIRE review. The contractor shall be licensed by the State of California, California Fire Code. A licensed alarm company shall monitor all fire protection and hazardous conditions systems.

**Private Water System Requirements**

***Commercial fire suppression system water storage tanks must be steel and located a minimum of 20 feet from structures.*** NFPA Standard 22 Water tanks for private Fire Protection, NFPA Standard 24 Installation of Private Fire Service mains and their Appurtenances, NFPA Standard 25 Inspection, Testing and Maintenance of Water-Based Fire Protection Systems shall be utilized for this project.

The amount of emergency water required for fire suppression will be determined and approved by a registered licensed Fire Protection Engineer in cooperation with CAL FIRE/County Fire. Water required to be held in storage for domestic and/or landscaping purposes will be in addition to or separate from that required for fire suppression.

**PRESSURIZED System and Hydrant Specifications**

Plans shall be submitted to the County Fire Department for approval of the distribution system and hydrant locations. Fire hydrants shall have two, 2 ½ inch outlets with National Standard Fire threads and one 4 inch suction outlet with National Standard Fire threads and comply with County Standard W-1. Each hydrant shall be identified by a blue reflective dot located on a non-skid surface located just off of center on the fire hydrant side. Hydrants must be protected from vehicle impact with the use of curbing or bollards.

**FDC**

The fire department connections (FDC) supporting the required fire protection systems shall be located within 20 feet of a San Luis Obispo County Dept. of Public Works/County Fire standard fire hydrant and visible on fire engine approach to the building.

**DRAFT System and Hydrant Specifications**

**Hydrants for the currently proposed project may be draft; a pressurized hydrant system is not required.** Future development of the facility may require a pressurized hydrant system. The draft hydrant system must meet County Fire commercial water supply standards as cited on the [www.calfireslo.org](http://www.calfireslo.org) website. Each hydrant shall be identified by a blue reflective dot located on a non- skid surface located just off of center on the fire hydrant side. Hydrants must be protected from vehicle impact with the use of curbing or bollards.

**Additional/Special Conditions**

**ALARMS**

**NFPA 72 Alarm systems**

***A centralized interlinked Fire Alarm System is required for this project.*** The alarm system shall terminate at a 24-hour monitoring point.Two sets of plans shall be submitted to CAL FIRE/San Luis Obispo County Fire for review and approval. California Fire Code Chapter 15 section 907. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station listed by Underwriters Laboratory for receiving fire alarms in accordance with NFPA 72. The supervising station shall contact and notify the Fire Chief or their call receiving location immediately on notification of an alarm and prior to making contact with the protected premises.

Alarm system must be centralized and interlinked for the entire facility and include monitoring for all site alarm systems including; all on site Fire Protection Systems, and any and all hazardous materials, monitoring of hazardous materials, compressed gases, flammable and combustible liquids, liquefied petroleum gases, storage, delivery and processing areas.

A Fire Alarm System is required throughout the site for the various fire suppression systems and required hazardous conditions monitoring. The alarm system shall terminate at a 24-hour monitoring point. Two sets of plans shall be submitted to the County Fire Department for review and approval. California Fire Code Chapter 15 section 907.

**Proprietary Alarm systems (24 hour staffed Industrial Facilities)**

The existing and new alarm systems must be in compliance with NFPA 72 and monitoring must meet all requirements outlined in Chapter 26 section 26.4 Proprietary Supervising Station Systems.

**Hazardous Materials Alarm(s)**

Approved monitoring method shall be provided to detect hazardous materials. An emergency alarm shall be provided if hazardous materials have a hazard ranking of 3 or 4 in accordance with NFPA 704 and exceed the maximum allowable quantity per control area. California Fire Code Chapter 50

**Commercial Cooking Operations**

California Fire Code Section 904.11 states Commercial cooking equipment that produces grease laden vapors shall be provided with a Type I Hood, in accordance with the California Mechanical Code, and an automatic fire extinguishing system that is listed and labeled for its intended use as follows:

1) Wet chemical extinguishing system, complying with UL 300.

2) Carbon Dioxide extinguishing systems

3) Automatic Fire Sprinkler Systems

**Hazardous Materials**

Prior to final, a Hazardous Materials Management Plan (HMMP) must be provided. Chemical storage/treatment and hazardous gases will require a Hazardous Materials Management Plan HMMP in accordance with California Fire Code Chapter 50/Title 19 Division 2, Chapter 4/Health and Safety Code Chapter 6.95.

CAL FIRE requires a written plan addressing safeguards to minimize the risk of unwanted releases, fires or explosions involving hazardous materials. Additionally, the written plan shall include safeguards to minimize the consequences of an unsafe condition involving hazardous materials during normal operations and in the event of an abnormal condition.

Precautions for the safe storage, handling, or care of hazardous materials shall be in accordance with California Fire Code chapter 50 and shall include a Fire Department liaison to aid the Fire Department in pre-planning for all aspects of emergency responses.

Rooms, buildings or areas used for the storage of liquid or solid hazardous materials shall be provided with spill control and secondary containment, California Fire Code Chapter 50.

**Additional/Special Conditions**

**California Fire Code Chapter 53 Compressed Gasses**

Containers, cylinders and tanks shall be secured and separated from hazardous conditions. Monitoring and detection shall be in accordance with section 5303.16.10.

**California Fire Code Chapter 57 Flammable and Combustible Liquids**

Signage for identification and warning inherent hazard of flammable or combustible liquid shall be provided. Signs will be of durable material white lettering on a red background. Letters shall not be less than 3 inches in height and ½ inch in stroke. Piping shall be identified in accordance with ASME A13.1. Permanently installed or mounted tanks more than 100 gallons in capacity storing class I, II or III liquids shall bear a label and placard identifying the materials. Placards shall be in accordance with NFPA 704.

**California Fire Code Chapter 61 Liquefied Petroleum Gases**

Minimum separation between LP-containers and buildings and public ways must comply with CFC table 6104.3. No Smoking signs must be posted within 25 feet of containers or point of transfer. Weeds, grass and brush, trash and other combustible material shall be kept a minimum of 10 feet from containers. Protection from vehicular damage shall be provided in accordance with California Fire Code section 312.

**General Fire Precautions and Signage**

**Portable Fire Extinguishers**

Portable fire extinguishers shall be installed in all the occupancies in compliance with the California Fire Code section 906 and Title 19. The contractor shall be licensed by the State Fire Marshal.

**Combustible Waste Material**

Every building or portion of a building shall be maintained in a neat orderly manner, free from any condition that would create a fire or life hazard or a condition which would add to or contribute to the rapid spread of fire, CCR Title 19 Division 1.

Refuse containers must not be stored within 5 feet of combustible walls, openings, or combustible roof eaves, unless the refuse container is protected by an automatic sprinkler system installed in accordance with California Fire Code section 903.

**Petroleum Tanks**

Fire Protection systems and safety precautions requirements shall be required in accordance with California Fire Code Chapter 57 Flammable and Combustible Liquids. Foam protection system shall be provided for above ground tanks California Fire Code section 5704.2.9.2 in accordance with NFPA Standard 11 Low expansion foam and combined agent systems, and NFPA Standard 15 Water Spray Fixed Systems NFPA Standard 30 Flammable and Combustible Liquids Code.

**Storage, Stockpiles and Enclosures**

Areas must meet all applicable California Fire Code requirements and be labeled with NFPA 704 required placarding.

**Electrical**

Electrical wiring and equipment shall be installed and maintained in accordance with California Fire Code section 605 and the California Electrical Code. Hazards and fire prevention concerns relational to Electrical equipment, wiring shall be abated as specified in the aforementioned Fire Code.

**Fire Safety during Construction:**

Prior to construction, an operational water supply system and established access roads must be installed in accordance with CFC Section 501.4. During construction all applicable Public Resources Codes must be complied with to prevent a wildfire. These will include the use of spark arresters, adequate clearance around welding operations, smoking restrictions and having extinguishers on site. The Industrial Operations Fire Prevention Field Guide will assist the applicant.

**Additional/Special Conditions**

**OIL PROCESSING FACILITIES**

**Drilling and plant operations (steam generators, pipe racks)**

Fire protection systems are required to minimize the loss from fire or explosion in liquid-processing facilities. Application of one or a combination of recommended systems as well as the use of fire resistive materials shall be determined by NFPA 30.

Where provided, fire control systems shall be designed, installed, and maintained in accordance with the following NFPA Standards: NFPA 11 Low medium and high expansion foam, 12 carbon dioxide extinguishing system, 12A Halon, 13 installation of sprinkler systems, 14 installation of standpipe and hose systems, 15 water spray fixed systems for fire protections, 16 installation of foam-water sprinkler and foam-water spray systems, 17 dry chemical extinguishing systems, and 2001 clean agent fire extinguishing systems.

Special operations and facility safety precautions shall be conducted as outlined in NFPA 30 and California Fire Code section 57; including but not limited to drilling, bulk transfer, refinement, vapor recovery, ventilation, spill control and secondary containment, fire protection, and static protection.

Tank vehicle and tank car certification shall be maintained in accordance with DOT 49 CFR, parts 100-185.

**Additional/Special Conditions**