

**PROTECTED AST
INSTALLATION**

Materials regulated in the context of this document are those having a designation of Class I, Class II or Class III-A liquid and regulated under Chapter 34 of the California Fire Code (CFC). Fire Prevention Division regulates all fuels, including fuel admixture(s) derived from vegetable oil, cooking grease or animal fat, as Class I, Class II or Class III-A liquid unless provided – compositionally equivalent – analytical data confirming otherwise.

The ensuing guidelines shall serve as supplement to regulatory parameters established in NFPA Section 30 and Chapters 22 and 34 of the CFC. Responsible Party shall be defined as any individual, business owner, or owner's representative, including the contractor of record, intending to retain regulated material or waste for purposes of storage or dispensing.

Permit Approval Prerequisites

- All aboveground tanks installed within the City of Ventura shall meet UL 2085 specifications for both fire-resistance and physical protection.
- Contractor of record shall obtain permit through Fire Prevention regarding the installation of the tank(s) and associated components ("the AST system") prior to construction. Application process requires Contractor to submit documentation verifying that they possess a current State License (A, B, C-36, C-61/D-40), Workman's Compensation Insurance, and City business license.
- Responsible party shall submit associated plans to Fire Prevention for review and approval.
- All AST systems shall be installed in accordance with applicable NFPA, CFC and manufacturers' guidelines.
- Contractor of record shall be responsible for ensuring that conditions at the site provide for workplace safety, protection of the environment, as well as maintenance and integrity of nearby structures.
- Under no circumstances shall any regulated material or waste be placed into the AST or associated components without prior approval from Fire Prevention.
- Contractor of record shall be responsible for scheduling any and all associated inspections. Fire Prevention shall withhold permit to operate AST system until verification has been received indicating satisfactory completion of all associated inspections.

Submittal in Conjunction with Permit Application

- Three (3) complete sets of applicable documents (drawings, manufacturers' specifications, engineering calculations, third party testing, et al) detailing the construction and installation of the AST system shall be submitted to Fire Prevention at the time of permit application. No construction or installation of the AST system shall take place without prior documented approval by Fire Prevention.

Submittals Associated with Permitted Storage of Regulated Materials/Waste

- New or revised Hazardous Materials Business Plan shall be submitted to Fire Prevention within 30 days of permit to operate.
- Aboveground petroleum storage exceeding 1320 gallon shall require the facility to prepare and implement a Spill Prevention Contingency and Countermeasures (SPCC) Plan prior to commencing operation.

On-site Inspection Criteria

Tank and Associated Piping

- System design, construction and installation in accordance with CFC 3404.2.7, CFC 3404.2.9.6 and UL 2085.
- Tank storage capacity for Class I or Class II liquids does not exceed 12,000 gallons (individual) and 48,000 gallons (aggregate). NFPA 30A, Table 4.3.2
- Tank storage capacity for facilities dispensing Class II or Class III-A liquids does not exceed 20,000 gallons (individual) and 80,000 gallons (aggregate). NFPA 30A, Section 4.3.2.5.
- Tank and associated distribution piping secondary containment (shell or diking) per CFC 3404.2.9.7.4.

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- Dike capacity minimum 24-hour rainfall (25-year storm) per local ordinance.
- Tank location in accordance with NFPA 30A, Table 4.3.2.4.

<u>Size (gal)</u>	<u>Lot Lines (ft)</u>	<u>Buildings (ft)</u>	<u>Shell to Shell (ft)</u>	<u>Bldg Opening (ft)</u>
0-6000	15	5	3	5
6001-12000	25	15	3	5
12001-20000*	25	15	3	5

- Range applicable for fuel dispensing facilities housing Class II or Class III-A
- Tank venting per *CFC 3404.2.7.3*.
- Tank emergency venting per *CFC 3404.2.7.4*
- Piping and connections per *CFC 3403.6*
- Installation (anchors, supports, other) in accordance with CBC per *CFC 3404.2.9.3*.
- Annular space electronic leak detection (audible and visual alarm) per local ordinance
- Piping and connections external to secondary containment double-walled. *CFC 3404.2.9.7.4*
- Vehicle impact protection (bollards, K-rails) per *CFC 3404.2.9.7.5*.
- Fill connections equipment with five gallon spill container per *CFC 3404.2.9.7.8*
- Minimum clearance (10 feet) of weeds and/or combustibles per *CFC 2205.7*
- Overfill protection (mech. Shutoff 95%, alarm 90% capacity, or 15 gpm restricted flow) per *CFC 3404.2.9.7.6*.
- Field test tanks(s) and associated piping prior to operation. *CFC 3403.6.3 and manufacture requirements*

<u>Component</u>	<u>Test</u>	<u>Duration</u>
Primary Tank	Manufacturer Specs (or 5 psig)	Manufacturer Specs (or 30 mins)
Secondary Tank	Manufacturer Specs (or 3 psig)	Manufacturer Specs (or 30 mins)
Primary Piping	Manufacturer Specs (or hydrostatic*)	Manufacturer Specs (or 30 mins)
Secondary Piping	Manufacturer Specs (or 5 psig)	Manufacturer Specs (or 30 mins)

*150% of anticipated pressure

- Warning signs (“DANGER -- _____ LIQUIDS/NO SMOKING”) per *CFC 3403.5*
- Adequate spill equipment (not more than 30 feet from tank) per *CFC 3403.4*
- Fire extinguishers (2A-10BC; within 10-30 feet) per *CFC 3403.2.1*.

Associated Dispensing System

- Dispensing system(s) comply with *CFC 2206.7*
- Electrical disconnect provided on all dispensers in accordance with the Electrical Code. *CFC 52015.4*
- Unsupervised location; 25-gallon dispenser reactivation in place. *CFC 2204.3.7*
- Unsupervised location; signage addressing emergency, fire, releases provided in a conspicuous location. *CFC 2204.3.5*

In case of Fire, Spill or Release

1. Use emergency pump shut off!
2. Report the accident!
3. Call 9-1-1

Facility address _____

- Emergency shutdown device* between 20 and 100 feet from dispenser. *CFC 2203.2*
* Clearly labeled: “EMERGENCY FUEL SHUTOFF”
- Dispenser hoses equipped with emergency breakaway devices. *CFC 2202.3.3.2*
- Dispenser located at least 10 feet from building/lot lines; nozzle fully extended not within 5 feet of building opening. *CFC 2203.1*

General Health and Safety

- Owner and Operator acknowledge a comprehensive understanding of proper operating procedures relating to the regulated aboveground tank system(s), as specified by the manufacturer and regulated under the CFC. *CFC 407.4*
- Owner and Operator acknowledges a comprehensive understanding of proper storage and handling procedures relating to hazardous material(s) housed in the tank system(s), as specified in the associated Material Safety Data Sheets and regulated under the California Fire Code. *CFC 407.4*
- Owner and Operator acknowledges a comprehensive understanding of proper response procedures resulting from an uncontrolled material(s) release, fire or explosion, as specified in the facility’s Hazardous Materials Management Plan (HMMP). *CFC 407.4*
- Owner and Operator acknowledges training facility personnel in proper response procedures resulting from an uncontrolled material(s) release, fire or explosion, as specified in the facility’s Hazardous Materials Management Plan (HMMP). *CFC 407.4*