

ANAHEIM FIRE DEPARTMENT
PHASE II ENHANCED VAPOR RECOVERY (EVR) AND
IN STATION DIAGNOSTICS (ISD) INSTALLATION REQUIREMENTS

References: NFPA 30, 30A & 704; CFC 22, 27, 34 & 35; CA HSC 6.7; T23 CCR

This document summarizes the requirements specific to installation of EVR Phase II and ISD equipment at gasoline dispensing facilities in the City of Anaheim. When associated with an underground storage tank (UST), an UST Modification Permit is required to be applied for and obtained from the Anaheim Fire Department prior to the start of the project. Additional general requirements necessary to obtain the permit are included in the Specifications and Requirements for UST Installation and Modification Guidelines. This document and the Permit Application are available at www.anaheim.net/hms. Plan approval by City of Anaheim Planning Department, Building Division and Public Works Department must be obtained prior to applying for the permit from the Anaheim Fire Department.

Site Plans (three sets required on any size paper)

- Plans shall be to scale and show the complete site as well as all adjacent properties. If the site is very large, then additional pages shall detail the specific areas on the site.
- Site map shall at a minimum show all tanks, vent risers, dispensers, structures, enclosures, canopies, property lines, street names, landscaping, external electrical panels and outlets, external lighting, leak detection enunciators, emergency shut-offs and fire extinguishers.
- Legends shall be included containing a description of all symbols and abbreviations used.

Scope of Work

- It shall be written on the main cover page or first page of site plans under the heading “Scope of Work.”
- It shall be complete as to describing all work and equipment involved with the project.

Product Equipment List

- List shall be of a matrix style that includes the Make, Model #, Listings and Quantity of all components being installed, modified or removed including items necessary to adapt existing equipment to new.
- In the case of piping additions or replacement, “Quantity” shall equal feet of piping used.

Contractor Information Requirements: (submit one photocopy of each)

- ICC Enhanced Vapor Recovery System Installation and Repair Certification
- ICC UST Technician Certification (ISD included projects only)
- Manufacturer certifications for all equipment to be installed
- City of Anaheim Business License
- California Contractor’s License (A, B, C-36 or D-40) with Hazardous Substance Certification
- California Worker’s Compensation Coverage Insurance Certificate

Location of EVR Phase II Unit Installation:

- A minimum of ten (10) feet from property lines that can built upon, structures and combustibles
- A minimum of twenty (20) feet away from fueling dispensers
- Not located in areas where vapors may become trapped
- EXCEPTION: Where all of these location requirements cannot be met, acceptable means include:
 - Approved water-spray fire protection system
 - Approved two-hour fire rated protection provided
 - Structure construction is 4-hour rated (applicable when unit would be within than 10’)

Miscellaneous EVR Phase II Unit Requirements

- Only manufacturer's parts and accessories shall be installed, unless otherwise approved by this agency.
- All weight support systems must be engineer designed and calculations provided to the City of Anaheim's Building Division.
- Manifolding of vent piping at the risers shall be a minimum of 10' above grade and accurately depicted.
- All vent risers shall be accurately depicted, including Pressure/Vacuum Vent Valves or other cover.
- Venting must terminate at least 12 feet above grade and 18 inches above roof, parapet or canopy.
- If any underground vent lines are to be removed, relocated or extended, then a detail of the existing and new vent line shall be shown.
- All wiring must meet the National Electric Code standards. Intrinsically safe wiring must be in a 2-hour fire resistance rated conduit.
- The piping from the vent riser to the unit must have a flexible connector installed at no more than 90 degrees or less than 45 degrees angle to allow for seismic and differential movement.
- The air breather piping from a horizontally installed Healy unit must be anchored for stability. A flexible connector is required to be installed between the anchoring and tank. (see previous item)
- For Healy units, "GASOLINE" and "FLAMMABLE VAPOR" signs shall be provided with a minimum of three (3) inch high lettering on a contrasting background; NFPA 704 placard is also required.
- All enclosure or screening doors must have an attached NFPA 704 placard.
- One minimum rated 2-A: 20BC fire extinguisher shall be located within 75' of the unit.
- Protection from vehicles in accordance with CFC, 312:
 - Constructed of concrete filled steel with minimum 4" diameter installed 3' above ground and 3' below grade depth in a concrete footing of not less than 15" diameter spaced not more than 4' apart on center and located not less than 3' from the unit and vent risers
 - Other barrier a minimum of 3' above ground that can resist a force of 12,000 pounds at 3' above ground
 - Note: An enclosure or other screening material is not vehicle protection.
- Testing must be conducted per SCAQMD requirements.

Miscellaneous ISD Requirements

- Flow meter, pressure sensor devices and all their connections must be above the shear valve.
- If replacing a dispenser, the signage, island and vehicle protection shall meet current requirements.
- The UDC must fully encapsulate the inside dimensions of the dispenser and island opening.
- Alarm enunciators shall be located in a normally occupied area or provided with remote on-site or off-site audible and visual alarm indication in a normally occupied area.
- A revised UST Monitoring Plan is required for the ISD and software upgrade, if specified on the plan.
- A UST Monitoring System Certification shall be performed and passed prior to final approval.
 - Note: Mechanical leak detectors may be omitted from testing at this time.

Questions or clarification regarding these requirements should be addressed to either Deputy Fire Marshal John White at (714) 765-4055, or jowhite@anaheim.net or Senior Hazardous Materials Specialist Fred Chun at (714) 765-4054, or fchun@anaheim.net.
