



**SAN BERNARDINO COUNTY  
IN STATION DIAGNOSTICS (I.S.D.) AND  
HEALY CLEAN AIR SEPARATOR (C.A.S.)/VAPOR PROCESSING UNIT (VPU)  
INSTALLATION REQUIREMENTS**

**Site Map**

- Plans shall be to scale and show the complete site, if the site is very large (i.e. Airport) then additional pages shall detail the specific areas on the site. Site map shall show all tanks, buildings, property lines, street names, overfill alarm panel, main electrical panels, emergency shut offs, new and existing UST alarm panel locations

**Scope of Work**

- Shall be written on the main cover page under the heading “Scope of Work”
- Shall be complete as to the work being done
- Shall include any installation, modification or removal of any components in the UST system

**Legend**

- Shall contain a description of any symbols or abbreviations being used

**Product Equipment List**

- Shall be complete and of a matrix style that includes the Make/ Model #/ Size/ and Quantity of components being utilized (this would include any auxiliary parts such as clam shells, nipples, etc.)
- In the case of piping additions or replacement, “Quantity” shall equal feet of piping used
- Contractors may be required to provide cut-sheets showing listing agency

**Certifications Required**

- Proof of ICC EVR certification- Vapor Recovery System Installation and Repair
- Proof of AQMD EVR application for permit
- Proof of Healy and other manufacturer certifications
- All required Executive Orders certifications
- ICC Installer/Retro

**Procedures for C.A.S. (Healy) Installation**

- Vapor processing units shall be located a minimum of ten (10) feet from adjacent property lines, from any buildings on the same property, and from a public way, i.e. street, sidewalk.
- Vapor processing units shall be located a minimum of twenty (20) feet away from fueling dispensers
- Vapor processing units shall not be located under canopies, overhangs or other areas where vapors may become trapped
- Any manifolding of vent piping from the risers to the Healy tank shall be a minimum of 8’ above grade and accurately depicted
- All vertical vent risers shall be accurately depicted [site specific] including Pressure/Vacuum Vent Valves
- A flex connector, with an associated support structure, shall be mounted on the vertical or horizontal connector between the Healy tank and vent risers.
- If any underground vent lines are to be removed or relocated, then a detail of the new vent line runs shall be shown and may require installation of a vent box, flex connector, sensor, dw piping.
- A “NO SMOKING” /“FLAMMABLE VAPORS” sign shall be provided at C.A.S. locations with minimum three (3) inch high lettering on a contrasting background; NFPA placarding may also be required
- One minimum rated 2-A: 20BC fire extinguisher shall be located within 75’ to 20’ of the Tank

**Enclosure Requirements:** When the above required distances cannot be provided, the following alternate method shall be applied;

- When Vapor processing units are located less than (10) feet from adjacent property lines, buildings on the same property or public ways, they shall be enclosed within an approved and permitted one-hour fire rated enclosure- Fire resistant material per Table 7-B, Vol. 1, Ch 7, 1998 CBC, or Non Combustible material per UBC Standard 2-1.
- The enclosure is required to be on at least 3 sides with an approved protective metal gate at the opening. When within ten (10) feet, enclosure opening shall not face property lines that can be built upon, buildings on the same property, fuel dispensing pumps, or the public way
- The enclosure shall extend a minimum of eighteen inches (18") above the highest part of the tank and provide an 18" minimum clearance between the tank and the enclosure

### **Bollard Protection**

- Bollards shall be provided for protection around C.A.S. tanks when an enclosure is not required
- Bollards shall be not less than 4" diameter steel, concrete filled, not less than 3' above grade and not less than 3' below grade into a minimum 15" concrete base
- Bollards shall be spaced not more than 4' apart and located not less than 3' from the Tank
- Bollards shall be provided in front of enclosure openings which exceed three (3') in width

### **Dispensers / ISD**

- Whether modifying an existing dispenser or installing a new dispenser for I.S.D. and/ or vapor recovery, the make and model of the dispenser(s) shall be given and a complete detail including, but not limited to, the exterior of the dispenser, whip, breakaway, hose, and nozzle shall be given
- All work being done behind the dispenser skirt and/or in the UDC shall be complete as to detail and shown for existing and new as designated by (E) existing and (N) new
- The diagram shall include but not be limited to details of vacuum pumps, flow meters, and sensors. If a flow limiter is being used, it shall be shown also.
- If existing UDC does not meet footprint of new dispenser, new UDC's must be installed, or SWRCB approved spill containment/control system.
- Vapor Recovery piping in UDC must have a vapor shear/impact valve and a flex connector. Both must be mounted/installed correctly.

### **Monitoring Systems / ISD**

- Panels shall be located in a normally occupied area; or provided with remote on-site or off-site audible/visual alarm indication in a normally occupied area
- A revised Facility Monitoring Plan *may be* required for the ISD and software upgrade additions
- Matrix shall include current software version and if upgrading, then new software version also
- Monitoring and equipment details shall be site specific (not generic)
- Diagram shall include all sensors, alarms, printers, and devices on the monitoring system
- Line diagram shall be in the form of an electrical "block type" diagram
- A complete monitoring certification test shall be performed and passed prior to final approval
- Recommend download of alarm history onto laptop prior to software replacement, then download onto board.

**NOTE:** These guidelines must not be construed as a variance or exemption from compliance with any other laws, regulations, local ordinance, or requirements of other regulatory agencies. It shall be the responsibility of the proponent to assure that all other requirements pertinent to the installation of this equipment are fulfilled.

For additional information, you may contact the San Bernardino County Fire Department's UST Plan Check Unit at (909) 386-8464

Code references: NFPA 30A, chapter 10; CFC-chapters 22, 27, 312,34 [chapter 5202.13.3, 1998 edition]