

# LOS ANGELES FIRE DEPARTMENT IN STATION DIAGNOSTICS (I.S.D.) AND HEALY CLEAN AIR SEPARATOR (C.A.S.) INSTALLATION REQUIREMENTS

#### **COVER PAGE**

Vicinity Map- Shall be clear and legible

## Site Map

• Plans shall be to scale and show the complete site, if the site is very large (i.e. UCLA) 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 phase II certification- Vapor Recovery System Installation and Repair
- Proof of AQMD EVR <u>application for permit</u>
- Proof of Healy and other manufacturer certifications
- All required Executive Orders certifications

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

- Vapor processing systems shall be located a minimum of ten (10) feet from adjacent property lines, from any important buildings on the same property, and from a public way
- Vapor processing systems shall be located a minimum of twenty (20) feet away from fueling dispensers
- Vapor processing systems shall be located a minimum of (15) feet from combustible materials storage areas
- Vapor processing systems 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
- If any underground vent lines are to be removed or relocated, then a detail of the new vent line runs shall be shown.
- 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 systems are located less than (10) feet from adjacent property lines, important buildings on the same property or public ways, they shall be enclosed within an approved and permitted <u>one-hour fire</u> resistant enclosure
- The enclosure is required to be on at least 3 sides with an approved protective non-combustible gate at the opening. When within ten (10) feet, the enclosure opening shall not face property lines that can be built upon, important 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.
- In no case shall vapor processing equipment (even when enclosed) be located within five (5) feet of adjacent property lines, building openings, or a public way.
- Vapor Processing Units on roofs shall be approved by the Building Department for load bearing compliance of both the C.A.S and the enclosure, and shall have a CALOSHA approved means of access shown on the plans.

#### **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 exceeds 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

## **Monitoring Systems / ISD**

- Panels shall be located in a normally <u>occupied area</u>; or provided with remote on-site or off-site audible/visual alarm indication in a normally <u>occupied area</u>
- A revised Facility Monitoring Plan may be required for the ISD and software upgrade additions
- Shall include an alarm matrix that shows "Sequence of Operations" for ISD warning and failure status
- 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

**NOTE:** All installations shall meet the State approved installation instructions for the Healy Systems Incorporated Clean Air Separator and the State approved In- Station- Diagnostics installation instructions.

For additional information, you may contact the Los Angeles City Fire Department's UST Plan Check Unit at (213) 482-7115

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