



ENHANCED VAPOR RECOVERY ADVISORY FOR GASOLINE DISPENSING FACILITIES WITH UNDERGROUND STORAGE TANKS

In the near future, Enhanced Vapor Recovery (EVR) modifications will be required at **ALL** gasoline-dispensing facilities using underground storage tanks subject to vapor recovery requirements. The intent of this advisory is to clarify the air pollution control requirements associated with upcoming gasoline facility modifications.

The intent of the EVR program is to increase the gasoline vapor collection efficiencies, thereby reducing emissions, through a series of equipment and system improvements. The California Air Resources Board (CARB) mandates these modifications. EVR modifications **must** be completed in accord with the attached CARB timeline **unless** an earlier modification requires that EVR changes occur sooner.

Please be aware that changes made to your gas station, including those required by the water board, may trigger the onset of EVR modifications sooner than the timeline would normally require. In order to reduce closure time and expenses, you may want to consider coordinating water resources mandated changes and EVR modifications so that they occur at the same time.

Many federal, state and local agency jurisdictions overlap responsibilities at gasoline dispensing facilities (GDFs). The California Air Resources Board's (CARB's) role is to set standards and specifications for vapor recovery systems and to certify systems that meet those standards for sale and installation in California. The State Water Resources Control Board operates the Underground Storage Tank program to prevent liquid fuel releases into the water supply. The water board regulations are enforced by the local Certified Unified Program Agencies, or CUPA's. Local air pollution control districts have the primary authority for control of air pollution emissions from stationary sources, which include service stations. Air Pollution Control Districts (APCDs), such as the Mojave Desert Air Quality Management District (MDAQMD), permit these facilities and enforce vapor recovery rules. Other agencies that regulate GDFs, include, local fire districts, and local departments of weights and measures.

The components and systems affected by EVR typically involve one or more of these agencies, which further complicate this program. So when in doubt, **please** contact the MDAQMD for assistance at (760) 245-1661.

Frequently asked questions:

1. What equipment components are affected by EVR?

Phase I vapor recovery system components include; the couplers that connect tanker trucks to the underground tanks; overfill prevention devices, and vent pressure/vacuum (P/V) valves.

Phase II vapor recovery system components include; gasoline dispensers; nozzles; piping; vapor processors; and system monitors.

2. What does this mean to the gasoline dispensing facility (GDF) owner/operators?

If you have an existing gas station, and make no changes to it, modifications to incorporate EVR components must be completed by the attached timeline, briefly described as follows.

A. New EVR Component Requirements

Must Be Completed By April 2005

- Install Phase I EVR components
- Ensure Phase II system is Onboard Recovery Vapor Recovery (ORVR) compatible, equipment change may be required.
- Ensure fuel-dispensing nozzles meet the Low Liquid Retention (350 milliliters) requirements.

Must Be Completed By April 2008

- EVR Phase II Standards & Specifications required at all GDFs. Requires that Phase II vapor systems meet CARB's Enhanced Vapor Recovery specifications*.
- EVR nozzles* required at all GDFs. These requirements will be a further improvement from the Low Liquid Retention nozzles mentioned above. These improvements will include an even lower nozzle liquid retention requirement (100 milliliters), and enforce specifications that will limit nozzle; spitting, spillage, and dripping.
- In Station Diagnostics (ISD) system*- Initially required for facilities which dispense greater than 1.8 million gallons of gasoline per year. ISD will involve a system of sensors, monitors, and controls, which will evaluate, and record the performance of vapor recovery systems.

Must Be Completed By April 2009:

- In Station Diagnostics (ISD) system* This ISD deadline will be enforced for lower throughput facilities, specifically those that dispense greater than or equal to 600,000 gallons of gasoline per year. System description is the same as above.

*These parts and systems are currently in certification testing, and are not yet available.

B. Unihose Dispenser requirement:

This requirement does not have a specific implementation deadline; instead, the installation of Unihose type dispensers is required when:

(1) A facility replaces more than 50 percent of the dispensers or makes a modification, other than the installation of required sensors, that affects over 50% percent of the vapor piping in the dispensers.

OR

(2) Facility modifications occur that meet the definition of “major modification” for a Phase II system.

Exception: Dispensers that must be replaced due to damage resulting from an accident or vandalism may be replaced with the previously installed type of dispenser.

3. What Facility Modifications trigger the onset of EVR early?

If a facility undergoes a “major modification” as described below, the facility status is changed from an “existing installation” to a “new installation” and must meet EVR requirements in effect at the time of the modification.

Phase I Major Modification:

A Modification of the Phase I system that involves the addition, replacement, or removal of an underground storage tank, or a modification that causes the tank top to be unburied, will cause you to be subject to Phase I EVR immediately.

Phase II Major Modification:

The addition, replacement, or removal, of 50 percent or more of the buried vapor piping, or the replacement of dispensers, will cause you to become subject to Phase II EVR requirements in effect at the time of the modification.

Call the MDAQMD at (760) 245-1661 if you are unsure if a particular change to your Phase I, or Phase II system will subject you to EVR requirements.

4. What is ORVR (On-Board Recovery Vapor Recovery)?

A federal mandate, that required the installation of vapor collecting devices (ORVR) on 100% of all passenger automobiles, starting in the year 2000. The problem with ORVR is that these vehicle-based systems are incompatible with some existing Phase II vapor recovery systems. This incompatibility leads to excess gasoline vapor emissions at the affected GDF.

5. What Phase II Systems are compatible with ORVR?

| Phase II System | CARB Executive Order & Approval Letters | Method of Achieving ORVR Compatibility |
|-----------------|---|--|
| Healy | G-70-186 G-70-191 | Nozzle senses ORVR vehicles and turns off assist vapor pump |
| Balance | G-70-52 Letter 03-04 | No vapor pump, so no forced air ingestion into underground tank |
| Hirt | G-70-177-AA Letter 03-06 | Vapor processor maintains negative pressure. Limited to 8 fueling points |

Permit Requirements:

An approved Authority to Construct (ATC) permit issued by the MDAQMD is required prior to beginning **any** construction that affects vapor recovery system(s).

Workshop:

A workshop to explain the EVR program and to answer questions will be scheduled in the near future. Please refer to our web site for date, time, and place: <http://www.mdaqmd.ca.gov>, or call us at (760) 245-1661.

For further information regarding CARB vapor recovery regulations, please visit the CARB website at: <http://www.arb.ca.gov/vapor/vapor.htm>

Information on state water board requirements for GDFs is available at: <http://www.swrcb.ca.gov/cwphome/ust/>