



South Coast  
AQMD

# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## AQMD Rule 461 Advisory No. 11-03

### Gasoline Dispensing Facilities Underground Storage Tank Equipment Upgrade (Revised September 21, 2004)

There are several new requirements that will affect most Gasoline Dispensing Facilities (GDFs) by April 1, 2005. All GDFs with underground storage tanks (USTs) will have to make significant equipment upgrades, and/or changes by this date. Planning ahead could save you time and money in construction costs and non-compliance penalties. For additional information, please visit the California Air Resources Board [website](#). By April 1, 2005, all GDFs with USTs must meet the following equipment requirements:

1. All Phase I vapor recovery equipment must be changed to an Enhanced Vapor Recovery (EVR) system. This requirement pertains to the underground storage tanks and associated tank filling equipment; including tank vent lines.
2. All Phase II vapor recovery systems must be On Board Refueling Vapor Recovery (ORVR) compatible.
3. All nozzles must meet the new Liquid Retention Requirement. Nozzles complying with the liquid retention standard are listed in Exhibit 1 of the latest version of [Executive Order G-70-199](#).
4. Unihose dispensers will be required when a GDF replaces more than 50% of the facility's dispensers, or the facility undergoes any major modifications. NOTE: AQMD requires submission of a permit application for all major modifications to GDF equipment or the vapor recovery system. You can contact our main office for application forms, or you can access [our website](#) to download applications.

#### Frequently Asked Questions (FAQs) Information:

1. *What are considered Major Modifications?*  
Major modifications are defined as: modifications that involve the addition, replacement, or removal of an underground storage tank, or modifications that causes the tank top to be unburied for Phase I, or modifications that involve the addition, replacement, or removal of 50% or more of the buried vapor piping, or modifications that involve replacement of more than 50% of the dispensers for Phase II.
2. *What happens if I don't meet the April 1, 2005 deadline?*  
The owner/operator of the GDF will be in violation of State law and AQMD Rule 461. Penalties of \$40,000/day or more, Order of Abatement, and count injunctions can be imposed on a GDF if found to be in non-compliance.
3. *What kind of Phase I EVR systems can I install at my facility?*  
Only California Air Resources Board (CARB) certified equipment can be installed, so your choice must be an approved system. Currently there are four systems available that are CARB certified:

- a. Phil-Tite Phase I Vapor Recovery System  
(Executive Order [VR-101-D](#))
- b. OPW Phase I Vapor Recovery System  
(Executive Order [VR-102-E](#)).
- c. EBW Phase I Vapor Recovery System  
(Executive Order [VR-103-A](#))
- d. CNI Manufacturing Phase I Vapor Recovery System  
(Executive Order [VR-104A](#)).

As other systems become approved they will be added to this list.

4. *Are there any additional or specific vapor recovery performance tests required with EVR systems?*

Yes. Your certified Tester should be familiar with the appropriate test for each system. These tests are:

- a. Static Torque Test for the Rotatable Phase I Adaptors (TP-201.1B) (Required for all phase I EVR systems)
- b. Leak Rate Test of Drop Tube/Drain Assembly (TP-201.1C) (Required for those equipped with a ball float assembly) or
- c. Leak Rate of Drop Tube Overfill Prevention Device / Spill Container Drain Valve (TP-201.1D) (Required for those equipped with an overfill prevention device)
- d. In addition, a leak rate and cracking pressure test of the Pressure Vacuum Valve (TP-201.1E) is required as part of a performance test and every three years thereafter.

5. *What is ORVR?*

ORVR stands for Onboard Refueling Vapor Recovery. This refers to the vapor collecting devices on some late model (1998 or newer) passenger vehicles. ORVR systems are not compatible with some existing Phase II vacuum assist vapor recovery systems and this has been found to lead to excess emissions at the GDF.

6. *What systems can I install that are ORVR compatible and CARB certified?*

The following systems are currently ORVR compatible and CARB certified:

- a. Balance System (Executive Order [G-70-52-AM](#))
- b. Healy Vac Assist System (Executive Orders [G-70-186](#) and [G-70-191-AA](#))
- c. Hirt Vac Assist System (Executive Order [G-70-177-AA](#))
- d. Please note: ORVR requirements and deadlines are different than Phase II EVR requirements and deadlines.

7. *What is nozzle liquid retention?*

This is the amount of gasoline remaining in a nozzle spout per 1000 gallons of gasoline dispensed. It is a measure of how a nozzle can minimize vapor emissions. Nozzles that currently meet this requirement are listed under Executive Order [G-70-199-AI](#). Please refer to [CARB web site](#) for more information.

8. *How do I begin to update my system to meet CARB Phase I EVR and Phase II ORVR requirements?*

Plan Ahead! Determine which Phase I EVR and/or Phase II ORVR system is best suitable for you. Contact GDF equipment manufacturers and construction contractors to discuss your needs. Submit an application to AQMD to modify your equipment, prior to any construction. Don't wait until the last minute because resources and labor may be limited.