

CELLY SERVICES, INC.

Environmental, Health and Safety Services

Underground Gasoline Storage Tanks and Enhancements to Gasoline Dispensers

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Like an Energizer battery, California regulations on the environment keep on going and going and going. The state of California has enacted new environmental regulations for underground storage tanks for gasoline and related dispensers. By April 1, 2005, all gasoline facilities dispensing with underground storage tanks will have to make significant equipment upgrades costing typically in the range of \$8,000-10,000 (depending upon your current system). Briefly, the requirements are as follows:

- All Phase I recovery equipment must be changed to an Enhanced Vapor Recovery (EVR) system. This requirement pertains to the underground storage tanks and associated filling equipment, including tank vent lines.
- All Phase II vapor recovery systems must be On Board Refueling Vapor Recovery (ORVR) compatible. This modification maybe extended by the local/state authorities due to lack of available equipment.
- All nozzles must meet the new Liquid Retention Requirement. Nozzles complying with the liquid retention standard are listed at the California Air Resources Board (CARB) website at www.arb.ca.gov/vapor/eo-phasell.htm. See the latest version of Executive Order G-70-199 on the CARB website.
- Unihose dispensers will be required when the facility replaces more than 50% of the facility dispensers or the facility undergoes any major modifications.

The local AQMD will require submission of permit application for all major modifications to the dispenser equipment or the vapor recovery system. For all the facilities with aboveground tank(s) for gasoline, the nozzle dispenser rules and the tank vent system rules apply as well. It will be difficult, if not impossible, for the average facility manager to discern the current level of compliance. Hence, it is imperative that the facility contacts a licensed contractor (ICC Certified) in the field to determine the level of upgrades required and the associated costs.

ALL YOU WANTED TO KNOW ABOUT DISPENSERS AND NOZZLES BUT WERE AFRAID TO ASK

1. What are considered Major Modifications? Major Modification is 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 court 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 could be installed, so your choice must be an approved system. Currently there are four systems available that are CARB certified:

- Phil-Tite Phase I Vapor Recovery System (Executive Order VR-101-D)
 - OPW Phase I Vapor Recovery System (Executive Order VR-102-D).
 - EBW Phase I Vapor Recovery System (Executive Order VR-103-A).
 - CNI Manufacturing Phase I Vapor Recovery System (Executive Order VR-104A).
- As other system becomes approved they will be added to this list.

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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:

- Static Torque Test for the Rotatable Phase I Adaptors (TP-201.1B) (Required for all phase I EVR systems).
- Leak Rate Test Drop Tube/drain assembly (TP-201.1C) (Required for those equipped with a ball float assembly) or
- Leak Rate Of Drop Tube Overfill Prevention Device/spill container drain valve (TP-201.1D) (required for those equipped with an overfill prevention device)
- 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 only.

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 system can I install that are ORVR compatible and CARB certified?

The following system is currently ORVR compatible and CARB certified:

- Balance System (Executive Order G-70-52-AM)
- Healy Vac Assist System (Executive Orders G-70-186 and G-70-191-AA)
- Hirt Vac Assist System (Executive Order G-70-177-AA)

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 (www.arb.ca.gov/vapor/vapor) for more information.

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

- 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.

(Source: Information from California Air Resources Board & SCAQMD was utilized to prepare this memo)

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