



CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION  
OFFICE OF THE STATE FIRE MARSHAL  
FIRE ENGINEERING - VAPOR RECOVERY PROGRAM



# VAPOR RECOVERY CERTIFICATION

## GASOLINE VAPOR RECOVERY SYSTEM

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**CERTIFICATION No.:** GVRC 005:044:009

**MANUFACTURER:** Vapor Systems Technologies, Inc., 650 Pleasant Valley Dr., Springboro, OH 45066  
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**DESIGN:** VST-ECS-CS3-310 and \*VST-ECS-CS3-110 Emissions Control Systems Membrane Processor Units.

This vapor processor unit is designed for use with an existing vapor recovery system at a gasoline refueling facility. The processor system is intended to reduce hydrocarbon emissions by controlling the underground storage tank (UST) pressure. When the UST pressure reaches +0.2 in. of H<sub>2</sub>O column pressure, monitored by a Listed external controller, the system turns on and the blower draws the vapor/air mixture from the UST. This vapor is forced through a selectively permeable membrane by a combination of blower pressure on one side of the membrane and vacuum from a vacuum pump on the opposite side. The membrane removes oxygen from the vapor stream and returns the concentrated VOC vapor to the UST. The oxygen stream is vented to atmosphere. The processor system shuts down when the UST pressure drops to -0.2 in. of H<sub>2</sub>O column vacuum. \* The VST-ECS-CS3-310 has a 3-phase electrical connection, the VST-ECS-CS3-110 has a single-phase electrical connection.

**APPLICATION:** For Phase II Systems.

**INSTALLATION:** To be installed in accordance with manufacturer's instructions and all applicable codes.

**MARKING:** The manufacturers name, model number and UL Listing Mark.

**CERTIFICATION:** Certified for use with Phase II EVR systems.

\*Rev 8-13-08ma

This certification is made pursuant to the authority granted to the California State Fire Marshal as contained in Sections 41955 through 41960 inclusive, California Health and Safety Code. The certification is based upon independent tests or other technical data submitted by the applicant. CSFM staff has reviewed the test results and/or data but does not make an independent verification of any claims. This certification is not an endorsement or recommendation for the use of the item(s) specified. This certification should not be used to verify correct operational requirements or installation criteria.

Date Issued: **AUGUST 13, 2008**

Authorized By: **JAMES PARSEGIAN**

*Supervising Deputy State Fire Marshal  
Vapor Recovery Program*