




GDF VAPOR RECOVERY PROGRAM PHASE II EVR AND ISD

Presented at the
Santa Clara County
CUPA Meeting

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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

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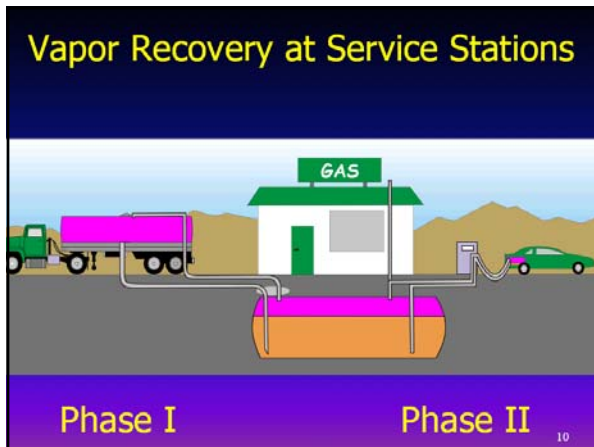
OUTLINE

- What and Why Phase II EVR & ISD
- Phase II Systems
- Requirements and deadlines
- How CUPAs are effected
- Contractor Certification
- BAAQMD Enforcement
- Who to Contact in Vapor Recovery

WHAT IS EVR AND ISD?

Enhanced Vapor Recovery or "EVR" refers to a new generation of clean nozzles and equipment that control emissions at gasoline dispensing facilities in California

In-Station Diagnostics or "ISD" refers to a system which monitors, stores data, and alarms the operator of vapor recovery system vapor leaks similar to liquid leak monitoring



"Why Enhanced Vapor Recovery?"

- Equipment in field not working as certified
- SIP Settlement Agreement Emission Reductions
- Onboard Refueling Vapor Recovery (ORVR)

EVR addresses all of these areas!

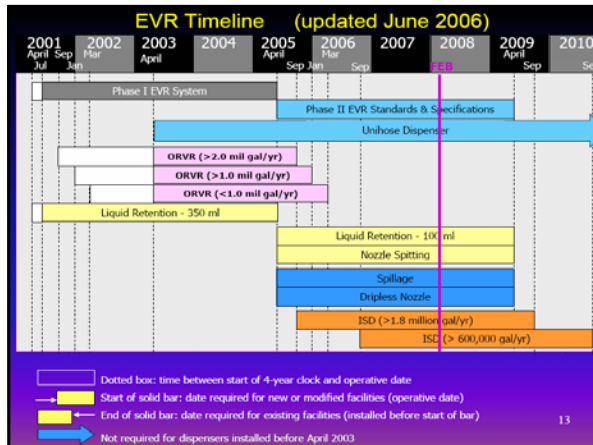
EVR Phase II Certified Systems

- Two EVR Phase II systems certified!!!!
 - Healy EVR Phase II System (assist)**
 - Not including ISD: VR-201
 - Including ISD: VR-202
 - VST EVR Phase II System (balance)**
 - Not including ISD: VR-203
 - Including ISD: expected April 2008
- Other systems currently in cert process
- Takes about 1 year to complete certification

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Phase II EVR equipment performance requirements {CP201}

- Emission control efficiency - 95%
- Summer/Winter fuels emission factor - <.38 lbs emitted/1000 gal pumped
- Nozzle spillage - ≤ 0.24 lbs/1,000 gallons
- Nozzle "spitting" - ≤ 1.0 ml per nozzle per test
- "Dripless nozzle" - <3 drops from nozzle after refueling
- Liquid retention - <100 ml/1000 gal pumped
- Vapor return piping - Min. 1/8" per 1' run
Min. 3" Nominal ID
- Vapor riser - Minimum 1" Nominal ID
- More @ http://www.arb.ca.gov/testmeth/vol2/cp201_may2006.pdf



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Phase II EVR 2009 Deadline

- 12,000 GDFs have 14 months to upgrade to EVR Phase II systems!**

- Obtain permits
- Purchase equipment
- Install using certified contractor

- Potential contractor shortage if wait until last minute

- See Advisories 359 & 372



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Healy Clean Air Separator



VAPOR SYSTEMS TECHNOLOGIES, INC (VST) MEMBRANE PROCESSOR



In-Station Diagnostics (ISD)

- Identifies failures automatically
- Notifies station operator
- Reduces emissions by early detection and prompt repair
- Supplements district inspections
- Concept similar to OBD for vehicles
- Tie-in to existing UST leak monitors

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ISD equipment requirements {CP201}

- Prohibits the dispensing of fuel when a vapor leak is detected
- Informs the station operator when there is a malfunction, failure, or degradation of the system
- Self tests including calibration of sensors and devices
- Operational 95% of the time annually
- Maintains archive of monthly reports for 12 months and daily reports for last consecutive 365 days
- More @ http://www.arb.ca.gov/testmeth/vol2/cp201_may2006.pdf

ISD Implementation Deadlines

> 1.8 million gallons/yr	600,000 – 1.8 million gallons/yr	≤ 600,000 gallons/yr
New and Major Mod Sites: Sept. 2005	New and Major Mod Sites: Sept. 2006	Exempt From ISD
Existing Sites: Sept. 2009	Existing Sites: Sept. 2010	

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How ISD Works

Monitors Two Primary VRS Functions:

1. Collection of Vapors during Fueling
 - ISD flow monitor
2. Containment of Vapors in UST system
 - ISD pressure monitor
 - ISD leak test

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HOW THIS EFFECTS CUPAs

- Permitting
- Extent of construction
- Digging for conduit & piping
- Software & ISD electronic cold starts

Permitting EVR Systems

- Some clients/consultants do not stop to consider how many and what kind of permits are needed
- Some clients/consultants believe the mandate implies that no permit is needed beyond, perhaps, an ATC from the local air district
- Some agencies have not decided how to permit the project (inconsistent responses to inquiries)

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The Placement of the EVR Phase II Equipment

1. Manufacturer's specifications
2. Setback requirements of the Fire Code for "vapor processors"
3. Local building setback requirements
4. What if there is "no place to put it"? Is there any room for compromise?

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Contractor Certification

- **Manufacturer Certified Installer**
 - Required by BAAQMD as per Executive Orders
- **Franklin Fueling/Healy, VST, Veeder-Root**
- **International Code Council (ICC) Certification**
 - **Not required** by BAAQMD currently
 - Slated for future Rule change
 - Test development in progress
 - www.icsafe.org or call 1-888-422-7233

BAAQMD ENFORCEMENT

If a GDF continues to operate without Phase II EVR after April 1, 2009, the law allows the BAAQMD to tag all gasoline pumps out-of-order

Any other actions on our part will be decided at a later date in consultation with our legal staff

BAAQMD GDF Contacts

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CALIFORNIA AIR RESOURCES BOARD / CAL- EPA

EVR Regulations

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Permitting Assistance

<http://www.evrhome.org>

Vapor Recovery General Information

<http://www.arb.ca.gov/vapor/vapor.htm>

Executive Orders

<http://www.arb.ca.gov/vapor/eo.htm>

**COUNTDOWN TO
EVR DEADLINE
392 DAYS UNTIL
April 1, 2009**

