Enhanced Vapor Recovery

August 7, 2008
Agenda

- Introduction
- Certified EVR Equipment
- New Rule Requirements
- Compliance Plan
- Upgrade Issues
- Questions
Introduction

Danny Luong
Senior Enforcement Manager
(909) 396-2622
Background

- Tenth year of Enhanced Vapor Recovery (EVR) (First introduced in 1998)
- Past phases have been rough upon due dates
- Started outreach efforts in June 2007
- In March 2008, AQMD Governing Board amended Rule 461 to require early planning
South Coast Air Basin

- Basin Population: 17 Million
- Number of Vehicles: 12 Million
- Retail GDF: 3,400
- Non-Retail GDF: 1,100

Approximately 7 Billion Gallons of Gasoline Dispensed Annually into Motor Vehicles
Emissions from Gasoline Dispensing

Total emission controlled by EVR when fully implemented:

55,860 tons/year or 153 tons/day

> 47,000 gallons/day when condensed

<table>
<thead>
<tr>
<th></th>
<th>Phase I (lbs/1000 gals)</th>
<th>Phase II (lbs/1000 gals)</th>
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<tbody>
<tr>
<td>Uncontrolled Emissions</td>
<td>8.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Controlled Emissions (EVR)</td>
<td>0.42</td>
<td>0.32</td>
</tr>
<tr>
<td>Emissions Prevented</td>
<td>7.98</td>
<td>7.98</td>
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### EVR & ISD Implementation Dates

<table>
<thead>
<tr>
<th>Phase</th>
<th>New or Major Modifications</th>
<th>Existing Facilities</th>
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<tbody>
<tr>
<td>Phase II EVR</td>
<td>April 2005</td>
<td>April 2009</td>
</tr>
<tr>
<td>ISD &gt; 1.8 million gal/year</td>
<td>September 1, 2005</td>
<td>September 1, 2009</td>
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<tr>
<td>~38% of Retail GDFs</td>
<td></td>
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<tr>
<td>ISD &gt; 600,000 gal/year</td>
<td>September 1, 2006</td>
<td>September 1, 2010</td>
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<tr>
<td>~56% of Retail GDFs</td>
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- By September 2010, 94% of Retail GDFs will be required to have ISD
EVR Installation Status

Gasoline Dispensing Facilities (GDFs) – August 5, 2008

Total 4,500
✓ Permitted 2,226
✓ Completed Phase II 623
Stations to permit 2,274
Stations to upgrade 3,877
Early AQMD Actions

- Started outreach effort early (June 2007)
  - 3 Public Meetings
  - 2 Advisories
  - Meetings with major gasoline dealers
- CUPA
  - Maintain close coordination
  - Developed application template
- Local city departments
  - 4 meetings in different locales
- Amended Rule 461
Sources of Information

- Information related to Gasoline Dispensing:
  
  http://www.aqmd.gov/comply/Rule461/EVR-Update.htm

- AQMD Website:
  
  http://www.aqmd.gov
Certified EVR Equipment

Nola Oriola
A.Q. Analysis and Compliance Supervisor
(909) 396-2382
EVR Phase II Certified Systems

- 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: VR-204
Healy EVR Phase II System

900 EVR Nozzle

VP1000 Vacuum Pump

Clean Air Separator
Healy Clean Air Separator (CAS)
Healy Clean Air Separator (CAS)
Healy Clean Air Separator
Healy Clean Air Separator
Another Option: Horizontal CAS
VST EVR Phase II System
VST Processor Operation
Which System Fits Best?

Balance vs. Assist

- Most GDF operators believe EVR balance system will be cheaper than EVR assist as they already have the balance system.
- Total cost depends more on which EVR processor fits with GDF site layout.
- Healy: large and may need enclosure, but no electrical or sensors.
- VST: small, but requires 2 vent lines, electrical & sensor conduit (even the non-ISD version).
In-Station Diagnostics (ISD)

- Identifies issues 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
ISD Implementation Deadlines

- **New and Major Mod Sites:**
  - Sept. 2005
  - Sept. 2006

- **Existing Sites:**
  - Sept. 2009
  - Sept. 2010

- **Exempt From ISD**
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
New Rule Requirements

George Kasper
Supervising Inspector
(909) 396-2378
Rule Amendment

- Plan for Phase II EVR upgrade if not installed by October 1, 2008
- Performance and reverification testing schedule
- Testing contractor requirements
- Certification for contractors and operators
- Delay EVR implementation on E85 and ORVR fleets
Equipment Testing

- More flexible test scheduling
  - Deadline based on month instead of day of month
  - Late or missing test will not change schedule
- Conduct Performance Tests within 10 days of transferring fuel to vehicle
- Contractor Sanctions for failing to properly conduct tests
Contractor Qualification

- Contractors who repair or install equipment need to be certified by:
  - Equipment Manufacturer
  - International Code Council (ICC) – Vapor Recovery

- Persons conducting tests of EVR equipment need to be certified by:
  - AQMD
  - Equipment Manufacturer
  - ICC – certification for tester when available
Delays in EVR Implementation

- Delay EVR requirements for non-retail ORVR fleets until April 1, 2012, provided all are met:
  - Use dripless and spitless nozzles
  - Monitor and record storage tank pressure
  - Dispense only to ORVR equipped vehicles
  - Maintain fueling records for each vehicle

- Delay EVR requirements for E85 fueling until April 1, 2012 to allow for equipment certification
Compliance Plan
Early Planning for EVR

- Increments of Progress within permit application or compliance plan
  - Application submittal
  - Equipment order
  - Installation contract
  - Testing contract
  - Equipment installation
  - Equipment testing
  - Declaration
Plan Submittal

Two Options:

- Incorporate Increment of Progress within permit (due 9/1/2008)
- Submit Compliance Plan separate from permit (due 10/1/2008)

Not needed if upgrade completed by 10/1/08
Option 1

Complete application package to include:

- Form 400-A
- Form 400-CEQA
- Form 400-E-11
- Form 461-CP
- Filing fee of $1,287.22

Due by 9/1/2008
Option 2

File Compliance Plan separate from application, package to include:

- Form 400-A
- Form 461-CP
- Filing fee of $224.60*

Due by 9/1/2008

*If ceasing operation after 4-1-09, file Form 461-CP without filing fee
Form 461-CP

http://www.aqmd.gov/comply/Forms/R461CP.pdf
Plan Approval Criteria

- Must demonstrate ability to comply by April 1, 2009
- Dates must meet:
  - Application dates must be at least 2 months prior to the planned start of construction
  - Equipment must be ordered no later than 7 days after all permits are received
  - Date for signing of contracts for installation and testing must be no less than one month prior to the planned construction start date
  - Date for starting installation must be on or before March 1, 2009
  - Date for starting equipment testing must be on or before March 21, 2009
Compliance FAQs

- What next after plan submittal
  - District issue an approved compliance plan
  - Monitor and assure due dates are met
- If the plan was denied
  - Submit an approvable plan within 30 days
- If missing a deadline
  - Submit plan alteration to change dates if there is still time
  - Apply for variance if circumstances are beyond reasonable control
    ✴ Violation is subject to penalty
- If permit did not include IOP and not complete by 10/1/08
  - Submit a separate compliance plan by 10/1/08
- Equipment availability issues:
  - Notify AQMD and ARB
Upgrade Issues

Danny Luong
Reported Issues

- Delay in permitting from local jurisdictions
- Equipment reconfigurations
- Waiting for another certified system
- Financing options

* There is no reported shortage of contractors, equipment supply or testers
Contact Information
AQMD Permitting

- Any Questions Regarding Permitting Issues
  - Randy Matsuyama  (909) 396-2551
  - Maria Vibal  (909) 396-2422
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<thead>
<tr>
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Acknowledgments

- Cindy Castronovo, CARB
  916-322-8957  ccastron@arb.ca.gov

Information Website:
  www.evrhome.org
236 days left and counting
Are you ready?

Questions?