

Aboveground Storage Tank Enhanced Vapor Recovery Workshop

California Air Resources Board
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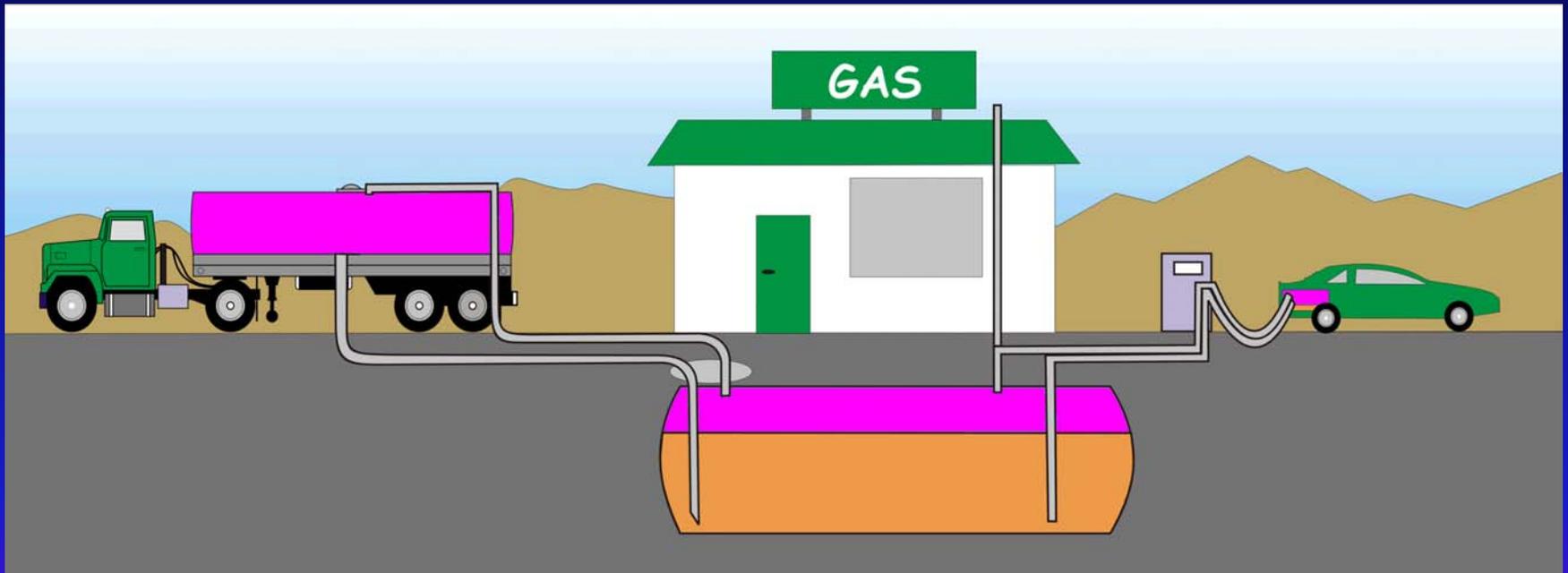
Workshop Agenda

- Welcome and Introductions
- Overview
- Certification and Test Procedure Update
- Emissions Estimate
- AST EVR Rulemaking Schedule
- Open Discussion/Comments

Overview

- Vapor Recovery
 - Regulations for Controlling Vapor Emissions from Gasoline Service Stations Initiated by ARB in the 1970's
 - Controls Divided into Two Phases
 - Phase I
 - Phase II

Overview



Phase I

Phase II

Overview

- **Enhanced Vapor Recovery (EVR)**
 - Approved by the Board in March 2000 for Underground Storage Tanks
- **EVR For Aboveground Storage Tanks**
 - Scheduled to be Presented to the Board December 11, 2003

Overview

- **AST EVR Workshops**
 - 5 Workshops Conducted
- **AST EVR Workgroup Meetings**
 - 7 Workgroup Meetings
- **Information Available On-line at:**
<http://www.arb.ca.gov/vapor/ast/archive.htm>

Overview

- AST Testing and Monitoring
 - Conducted from July 2002 to April 2003
 - 1,000, 2,000, 3,000, 6,000, 10,000 Gallon Insulated
 - 250 Gallon Single-Walled (monitored)
 - Over 20 Pressure Decay Tests Conducted
 - 3 Efficiency Phase I and Phase II Tests Conducted

Certification Procedure

- CP-206 Includes:
 - 180-Day Field Certification Test
 - Nozzle Performance Criteria
 - Standardization of Fuel Delivery Adaptors
 - No Leak Standard for Vapor Connections, Fittings, Emergency Vents and Tank Gauges

Certification Procedure

- CP-206 Proposed Effective Dates:
 - June 1, 2005 for New Installations
 - June 1, 2009 (4-year clock expires) for Existing AST's, unless they are subject to Major Modifications.

Test Procedure Update

- Proposal of Revised TP-201.3B:
Determination of Static Pressure Performance
 - Allowable Leakrate Revision, More Stringent
 - Systems with visible vapor leaks yet still passing the leak decay test.
 - Allow for Testing at Lower Ullages
 - Accommodates testing of 250 gallon AST's

Proposed TP-201.3B

- Allowable Leakrate Revision
 - Modification of Decay Constant (5 Min. Test)

CURRENT

-760.490

PROPOSED

-223.90

TP-201.3B

Allowable Leakrate

ULLAGE	<u>MINIMUM PRESSURE AFTER 5 MIN.</u>	
	<u>CURRENT</u>	<u>PROPOSED</u>
100	-----	0.21
150	-----	0.45
200	-----	0.65
250	-----	0.82
300	0.16	0.95
500	0.44	1.28
1000	0.93	1.60
2000	1.37	1.79
10,000	1.85	1.96

Emissions Estimate

- Statewide Emissions Estimate

	<u>INSULATED/PROTECTED</u>	<u>SINGLE-WALL STEEL</u>
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*AST INVENTORY	2,873	4,760
**EMISSIONS (TPD)	0.88	3.02

* Inventory based on fuel carrier survey

** Estimate based on AST monitoring data

Emissions Estimate

- Implementation of AST EVR Would Reduce Emissions by **50%**

	<u>INSULATED/PROTECTED</u>	<u>SINGLE-WALL STEEL</u>
*EMISSIONS (TPD)	0.44	1.51
**25% Single-Walled Tanks		.75

Total Emission Reduction (with 25% Single Walled Captured)= 1.19

*Emission Reduction with Implementation of AST EVR

**Emission Reduction with 25% Single-Walled Tanks Meeting Standard

Cost Estimate

- **Estimated Cost of Implementation**
 - Reduction = .44 (insolated) .75 (single-walled)
 - Cost Increase for Better Quality Components (emergency vents and tank clock gauges) = \$430
 - Certification Costs = \$170
 - **Estimated AST Life = 15 Years**
 - **Insulated = .25 Cents Single Walled= .15 Cents**
 - **38% Insulated 62% Single Walled**
 - **Total Cost = .19 Cents per Lb of Emissions Reductions**

AST EVR Rulemaking Dates

- 45-Day Public Comment Period
 - October 28, 2003 Through December 11, 2003
 - Comments During the Official Public Comment Period, Must be Directed to the Clerk of the Board.
 - AST EVR Board Hearing
 - Scheduled for December 11, 2003, Cal/EPA Headquarters Building, 1001 I Street, Sacramento

Open Discussion/Comments

Contact

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