TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE EFFECTIVE AND OPERATIVE DATES FOR ENHANCED VAPOR RECOVERY STANDARDS IN THE REGULATION FOR CERTIFICATION OF VAPOR RECOVERY SYSTEMS OF GASOLINE DISPENSING FACILITIES (SERVICE STATIONS)

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adoption of amendments to the regulations for certification of vapor recovery systems installed at gasoline dispensing facilities (service stations and similar facilities).

DATE: November 18, 2004

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Central Valley Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the ARB, which will commence at 9:00 a.m., November 18, 2004, and may continue at 8:30 a.m., November 19, 2004. This item may not be considered until November 19, 2004. Please consult the agenda for the meeting, which will be available at least 10 days before November 18, 2004, to determine the time when this item will be considered.

If you have a disability-related accommodation need, please go to http://www.arb.ca.gov/html/ada/ada.htm for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed amendments to section 94011, title 17, California Code of Regulations (CCR), and Table 2-1 in the Vapor Recovery Certification Procedure, CP-201, as last amended July 22, 2004.

Background:

The Air Resources Board (Board or ARB) certifies the vapor recovery equipment that is used in service stations, also referred to as gasoline dispensing facilities (GDFs). Control of

the emissions of air pollutants from GDFs is necessary to reduce hydrocarbon emissions that lead to the formation of ozone and to control emissions of benzene, a constituent of gasoline vapor that has been identified as a toxic air contaminant. The ARB is currently implementing the Enhanced Vapor Recovery (EVR) program, which requires that vapor recovery systems be compatible with fueling vehicles equipped with onboard refueling vapor recovery (ORVR) by April 1, 2005. The EVR program also requires several additional vapor recovery system standards to be met by April 1, 2009.

Need for Amendment and Adoption

Gasoline marketers, service station operators, air pollution control districts and many vapor recovery equipment manufacturers have notified the ARB that more time is needed for existing service stations to upgrade equipment to meet the April 1, 2005, ORVR compatibility deadline. Gasoline marketers have been waiting for a manufacturer to develop and obtain the ARB's certification of a vapor recovery system that meets all EVR requirements to avoid having to upgrade equipment twice, once to meet the April 1, 2005, ORVR compatibility and then a second time to meet the remaining EVR standards.

The first EVR Phase II system is expected to be certified by November 2004 at the earliest. Under the current ORVR compatibility deadline, existing service stations would have four months or less to complete the required upgrades once an EVR Phase II system is certified. During this time, an estimated 3,500 stations will need to choose an EVR or ORVR compatible system, apply and obtain permits, retain a contractor, and install the vapor recovery equipment. Because obtaining the necessary permits alone may take one to three months, it is not feasible to upgrade thousands of service stations by the current April 1, 2005, deadline.

EVR effective and operative dates applicable to new facilities have been delayed previously when it has taken longer than anticipated to certify a system complying with all EVR requirements. The existing regulations allow the Executive Officer to issue executive orders allowing continued installation of pre-EVR systems when the Executive Officer determines that EVR systems are not commercially available. Executive Order G-70-203 extended the EVR Phase II system deadline for new installations from April 1, 2004, to October 1, 2004. Executive Order G-70-205 further extended the EVR Phase II implementation date to January 1, 2005, and the in-station diagnostics (ISD) implementation date to April 1, 2005. These Executive Order actions are not reflected in the effective and operative dates in the regulation and clarification is needed. The proposed action would make the required clarifications.

Summary of Staff Proposal

Staff proposes to amend the regulations to extend the ORVR compatibility deadline for existing GDFs by one year to April 1, 2006, and to amend other EVR regulation compliance dates to be consistent with the extensions provided in Executive Orders G-70-203 and G-70-205. Staff has determined that a one-year extension will provide sufficient time for all stations to comply with all of the EVR requirements in an orderly process. Specifically, an extension would also enable the installation of a full EVR Phase II system before the

ORVR compatibility deadline. Staff also proposes to amend the effective date for in-station diagnostics (ISD) for medium throughput stations to April 1, 2006, to maintain the ISD phase-in schedule.

Staff's proposal would change the implementation schedule of the Enhanced Vapor Recovery program. This proposal does not impose additional standards or relax existing standards, but provides more time for gasoline dispensing facility operators to comply with existing requirements.

ARB staff proposes to revise Table 2-1 of CP-201, "Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities," and to amend title 17, CCR, sections 94011, which incorporates CP-201 by reference.

COMPARABLE FEDERAL REGULATIONS

There are no comparable federal regulations that certify gasoline recovery systems for service stations; however, changes to ARB vapor recovery regulations have a national impact. ARB certification is required by most other states which mandate Phase I or Phase II vapor recovery at service stations.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action that includes a summary of the environmental and economic impacts of the proposal. The report is entitled: "Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider Proposed Amendments to the Effective and Operative Dates for Enhanced Vapor Recovery Standards in the Regulation for Certification of Vapor Recovery Systems of Gasoline Dispensing Facilities (Service Stations)."

Copies of the ISOR and full text of the proposed regulatory language, in underline and strike-out format to allow for comparison with the existing regulations, may be obtained from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing (November 18, 2004).

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the web site listed below.

Requests for printed documents and inquiries concerning the substance of the proposed regulations may be directed to the designated agency contact persons: Cindy Castronovo or George Lew, Engineering and Certification Branch, Monitoring and Laboratory Division, at (916) 327-0900.

Further, the agency representative and designated back-up contact person to whom non-substantive inquiries concerning the proposed administrative action may be directed are

Artavia Edwards, Manager, Board Administration and Regulatory Coordination Unit, (916) 322-6070, or Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR, and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at http://www.arb.ca.gov/regact/ORVRext/ORVRext.htm.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the cost or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons and businesses. The ARB has determined that affected gasoline station operators may each save $1,500 to $22,000 by having the option to upgrade once to a vapor recovery system that meets the ORVR requirement and all other EVR requirements. The ARB is not aware of any costs that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. Gasoline dispensing facilities operated by state and local agencies, such as the Department of General Services, California Highway Patrol or Caltrans, may realize similar cost savings.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings, to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, except as discussed above, or other nondiscretionary savings to state or local agencies.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has initially determined that the proposed amendments will not affect the creation or elimination of jobs within the State of California, the creation of new businesses and the elimination of existing businesses within the State of California, and the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will affect small businesses that own or operate gasoline dispensing facilities (service stations).

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements in the regulations and incorporated documents that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Before taking final action on the proposed regulatory action, the ARB must determine that no reasonable alternative considered by the ARB or that has otherwise been identified and brought to the attention of the ARB would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons or businesses than the proposed action.

A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing, or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received no later than **12:00 noon November 17, 2004,** *and addressed to the following:*

Postal Mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 I Street, 23rd Floor
Sacramento, CA 95814

Electronic mail is to be sent to: ORVRext@listserv.arb.ca.gov and received at the ARB no later than **12:00 noon, November 17, 2004.**

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB no later than **12:00 noon, November 17, 2004.**

The Board requests, but does not require, 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The ARB encourages members of the public to bring any suggestions for modification of the proposed regulatory action to the attention of staff in advance of the hearing.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under the authority granted to the ARB in sections 39600, 39601, 39607, and 41954 of the Health and Safety Code. This action is proposed to implement, interpret, or make specific sections 39515, 41952, 41954, 41956.1, 41959, 41960 and 41960.2 of the Health and Safety Code.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the ARB may adopt the regulatory language as originally proposed or with nonsubstantial or grammatical modifications. The ARB may also adopt the proposed regulatory language with other modifications if the modifications are sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. In the event that such modifications are made, the full regulatory text, with the modifications clearly indicated, will be made available to the public for written comment at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Visitors and Environmental Services Center, 1001 I Street, First Floor, Sacramento, California 95814, (916) 322-2990.

California Air Resources Board

Catherine Witherspoon
Executive Officer

Date: September 21, 2004

"The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.arb.ca.gov."

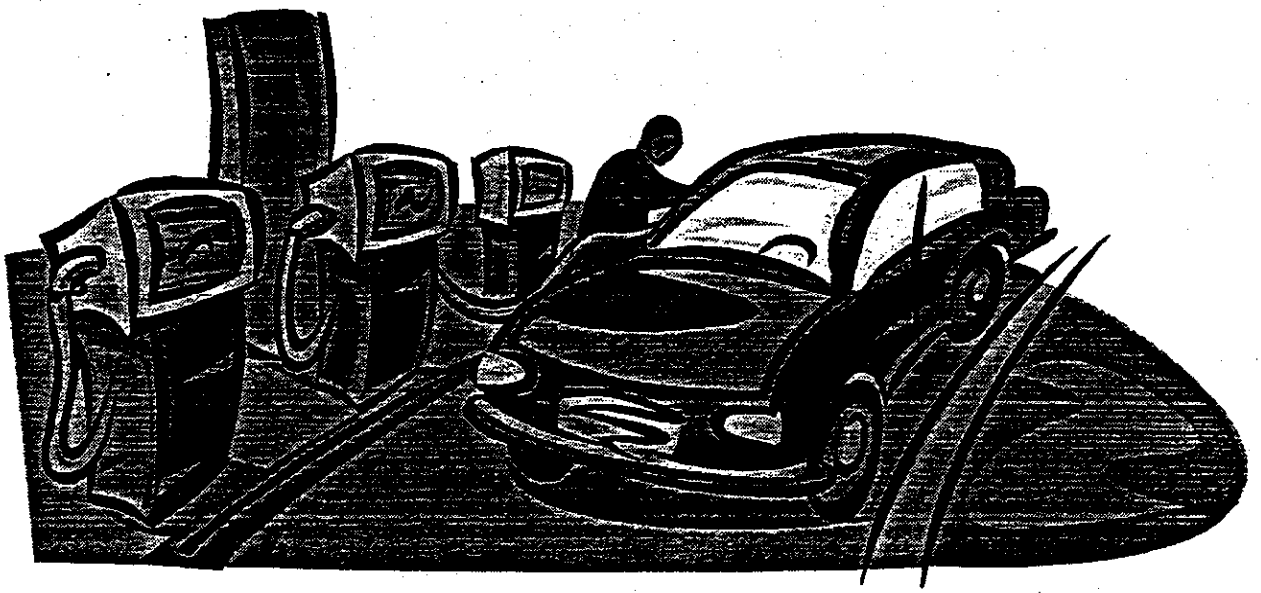
California Environmental Protection Agency

Air Resources Board

HEARING NOTICE AND STAFF REPORT

INITIAL STATEMENT OF REASONS FOR PROPOSED RULEMAKING, PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE EFFECTIVE AND OPERATIVE DATES FOR ENHANCED VAPOR RECOVERY STANDARDS IN THE REGULATION FOR CERTIFICATION OF VAPOR RECOVERY SYSTEMS OF GASOLINE DISPENSING FACILITIES (SERVICE STATIONS)

October 1, 2004



TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE EFFECTIVE AND OPERATIVE DATES FOR ENHANCED VAPOR RECOVERY STANDARDS IN THE REGULATION FOR CERTIFICATION OF VAPOR RECOVERY SYSTEMS OF GASOLINE DISPENSING FACILITIES (SERVICE STATIONS)

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adoption of amendments to the regulations for certification of vapor recovery systems installed at gasoline dispensing facilities (service stations and similar facilities).

DATE: November 18, 2004

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Central Valley Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the ARB, which will commence at 9:00 a.m., November 18, 2004, and may continue at 8:30 a.m., November 19, 2004. This item may not be considered until November 19, 2004. Please consult the agenda for the meeting, which will be available at least 10 days before November 18, 2004, to determine the time when this item will be considered.

If you have a disability-related accommodation need, please go to http://www.arb.ca.gov/html/ada/ada.htm for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed amendments to section 94011, title 17, California Code of Regulations (CCR), and Table 2-1 in the Vapor Recovery Certification Procedure, CP-201, as last amended July 22, 2004.

Background:

The Air Resources Board (Board or ARB) certifies the vapor recovery equipment that is used in service stations, also referred to as gasoline dispensing facilities (GDFs). Control of

the emissions of air pollutants from GDFs is necessary to reduce hydrocarbon emissions that lead to the formation of ozone and to control emissions of benzene, a constituent of gasoline vapor that has been identified as a toxic air contaminant. The ARB is currently implementing the Enhanced Vapor Recovery (EVR) program, which requires that vapor recovery systems be compatible with fueling vehicles equipped with onboard refueling vapor recovery (ORVR) by April 1, 2005. The EVR program also requires several additional vapor recovery system standards to be met by April 1, 2009.

Need for Amendment and Adoption

Gasoline marketers, service station operators, air pollution control districts and many vapor recovery equipment manufacturers have notified the ARB that more time is needed for existing service stations to upgrade equipment to meet the April 1, 2005, ORVR compatibility deadline. Gasoline marketers have been waiting for a manufacturer to develop and obtain the ARB's certification of a vapor recovery system that meets all EVR requirements to avoid having to upgrade equipment twice, once to meet the April 1, 2005, ORVR compatibility and then a second time to meet the remaining EVR standards.

The first EVR Phase II system is expected to be certified by November 2004 at the earliest. Under the current ORVR compatibility deadline, existing service stations would have four months or less to complete the required upgrades once an EVR Phase II system is certified. During this time, an estimated 3,500 stations will need to choose an EVR or ORVR compatible system, apply and obtain permits, retain a contractor, and install the vapor recovery equipment. Because obtaining the necessary permits alone may take one to three months, it is not feasible to upgrade thousands of service stations by the current April 1, 2005, deadline.

EVR effective and operative dates applicable to new facilities have been delayed previously when it has taken longer than anticipated to certify a system complying with all EVR requirements. The existing regulations allow the Executive Officer to issue executive orders allowing continued installation of pre-EVR systems when the Executive Officer determines that EVR systems are not commercially available. Executive Order G-70-203 extended the EVR Phase II system deadline for new installations from April 1, 2004, to October 1, 2004. Executive Order G-70-205 further extended the EVR Phase II implementation date to January 1, 2005, and the in-station diagnostics (ISD) implementation date to April 1, 2005. These Executive Order actions are not reflected in the effective and operative dates in the regulation and clarification is needed. The proposed action would make the required clarifications.

Summary of Staff Proposal

Staff proposes to amend the regulations to extend the ORVR compatibility deadline for existing GDFs by one year to April 1, 2006, and to amend other EVR regulation compliance dates to be consistent with the extensions provided in Executive Orders G-70-203 and G-70-205. Staff has determined that a one-year extension will provide sufficient time for all stations to comply with all of the EVR requirements in an orderly process. Specifically, an extension would also enable the installation of a full EVR Phase II system before the

ORVR compatibility deadline. Staff also proposes to amend the effective date for in-station diagnostics (ISD) for medium throughput stations to April 1, 2006, to maintain the ISD phase-in schedule.

Staff's proposal would change the implementation schedule of the Enhanced Vapor Recovery program. This proposal does not impose additional standards or relax existing standards, but provides more time for gasoline dispensing facility operators to comply with existing requirements.

ARB staff proposes to revise Table 2-1 of CP-201, "Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities," and to amend title 17, CCR, sections 94011, which incorporates CP-201 by reference.

COMPARABLE FEDERAL REGULATIONS

There are no comparable federal regulations that certify gasoline recovery systems for service stations; however, changes to ARB vapor recovery regulations have a national impact. ARB certification is required by most other states which mandate Phase I or Phase II vapor recovery at service stations.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action that includes a summary of the environmental and economic impacts of the proposal. The report is entitled: "Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider Proposed Amendments to the Effective and Operative Dates for Enhanced Vapor Recovery Standards in the Regulation for Certification of Vapor Recovery Systems of Gasoline Dispensing Facilities (Service Stations)."

Copies of the ISOR and full text of the proposed regulatory language, in underline and strike-out format to allow for comparison with the existing regulations, may be obtained from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing (November 18, 2004).

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the web site listed below.

Requests for printed documents and inquiries concerning the substance of the proposed regulations may be directed to the designated agency contact persons: Cindy Castronovo or George Lew, Engineering and Certification Branch, Monitoring and Laboratory Division, at (916) 327-0900.

Further, the agency representative and designated back-up contact person to whom non-substantive inquiries concerning the proposed administrative action may be directed are

Artavia Edwards, Manager, Board Administration and Regulatory Coordination Unit, (916) 322-6070, or Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR, and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at http://www.arb.ca.gov/regact/ORVRext/ORVRext.htm.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the cost or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulatory action are presented below.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons and businesses. The ARB has determined that affected gasoline station operators may each save $1,500 to $22,000 by having the option to upgrade once to a vapor recovery system that meets the ORVR requirement and all other EVR requirements. The ARB is not aware of any costs that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. Gasoline dispensing facilities operated by state and local agencies, such as the Department of General Services, California Highway Patrol or Caltrans, may realize similar cost savings.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings, to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, except as discussed above, or other nondiscretionary savings to state or local agencies.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has initially determined that the proposed amendments will not affect the creation or elimination of jobs within the State of California, the creation of new businesses and the elimination of existing businesses within the State of California, and the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will affect small businesses that own or operate gasoline dispensing facilities (service stations).

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements in the regulations and incorporated documents that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Before taking final action on the proposed regulatory action, the ARB must determine that no reasonable alternative considered by the ARB or that has otherwise been identified and brought to the attention of the ARB would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons or businesses than the proposed action.

A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing, or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received no later than **12:00 noon November 17, 2004,** and addressed to the following:

Postal Mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 I Street, 23rd Floor
Sacramento, CA 95814

Electronic mail is to be sent to: ORVRext@listserv.arb.ca.gov and received at the ARB no later than **12:00 noon, November 17, 2004.**

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB no later than **12:00 noon, November 17, 2004.**

The Board requests, but does not require, 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The ARB encourages members of the public to bring any suggestions for modification of the proposed regulatory action to the attention of staff in advance of the hearing.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under the authority granted to the ARB in sections 39600, 39601, 39607, and 41954 of the Health and Safety Code. This action is proposed to implement, interpret, or make specific sections 39515, 41952, 41954, 41956.1, 41959, 41960 and 41960.2 of the Health and Safety Code.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the ARB may adopt the regulatory language as originally proposed or with nonsubstantial or grammatical modifications. The ARB may also adopt the proposed regulatory language with other modifications if the modifications are sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. In the event that such modifications are made, the full regulatory text, with the modifications clearly indicated, will be made available to the public for written comment at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Visitors and Environmental Services Center, 1001 I Street, First Floor, Sacramento, California 95814, (916) 322-2990.

California Air Resources Board

Catherine Witherspoon
Executive Officer

Date: September 21, 2004

"The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.arb.ca.gov."

California Environmental Protection Agency

Air Resources Board

STAFF REPORT:
INITIAL STATEMENT OF REASONS FOR PROPOSED RULEMAKING,
PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE EFFECTIVE AND OPERATIVE DATES FOR ENHANCED VAPOR RECOVERY STANDARDS IN THE REGULATION FOR CERTIFICATION OF VAPOR RECOVERY SYSTEMS OF GASOLINE DISPENSING FACILITIES (SERVICE STATIONS)

Date of Release: October 1, 2004

Scheduled for Consideration: November 18 or 19, 2004

Location: California Environmental Protection Agency (Cal-EPA)
Headquarters Building
1001 I Street
Sacramento, CA 95814

Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

STAFF REPORT:
INITIAL STATEMENT OF REASONS FOR PROPOSED RULE MAKING, PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE EFFECTIVE AND OPERATIVE DATES FOR ENHANCED VAPOR RECOVERY STANDARDS IN THE REGULATION FOR CERTIFICATION OF VAPOR RECOVERY SYSTEMS OF DISPENSING FACILITIES (GASOLINE SERVICE STATIONS)

Prepared by:

Cindy Castronovo
Monitoring and Laboratory Division

Reviewed by:

William V. Loscutoff, Chief, Monitoring and Laboratory Division
George Lew, Chief, Engineering and Certification Branch
Kirk Oliver, Senior Staff Counsel

ACKNOWLEDGEMENTS

Staff wishes to acknowledge the participation and assistance of individuals from the following organizations in providing input on proposed amendments:

American Petroleum Institute (API)
Automotive Trade Organizations of California (AUTO-CA)
California Air Pollution Control Districts
California Air Pollution Control Officers Association (CAPCOA)
CAPCOA Vapor Recovery Committee
California Independent Oil Marketers Association (CIOMA)
California Retail Management Association
California Service Station & Automotive Repair Association (CSSARA)
San Diego Service Station Coalition (SDSSC)
Western States Petroleum Association (WSPA)

Staff appreciates the input from the following petroleum marketers:

BP-ARCO
Chevron Products Company
Circle K Stores
Conoco-Phillips
Cross Petroleum
Shell Oil Products US
Tesei Petroleum

Staff would especially like to thank the individual service station owners who took the time to come to the workshop and/or provide comments.

Staff also appreciates the input from the following vapor recovery equipment manufacturers:

ARID Technologies
EZ-Flo Nozzle & Equipment Company
Healy Systems, Inc.
Husky Corporation
OPW Fueling Products

Table of Contents

I. INTRODUCTION AND RECOMMENDATIONS

Introduction

Staff's proposal would change the implementation schedule of the Enhanced Vapor Recovery program. This proposal does not impose additional standards or relax existing standards, but provides more time for gasoline dispensing facility operators to comply with existing requirements.

In March of 2000, the Air Resources Board ("ARB" or "Board") approved the Enhanced Vapor Recovery (EVR) regulations. The EVR regulations established new standards for vapor recovery systems to reduce emissions during storage and transfer of gasoline at gasoline dispensing facilities (service stations). The EVR standards apply to both new and existing facilities and are being phased in from 2001 to 2009. In December 2002, the Board approved amendments to the EVR regulations, including revisions to operative and effective dates of several EVR standards to allow more time to develop and certify EVR vapor recovery systems. However, the April 1, 2005 deadline for all stations to comply with the Onboard Refueling Vapor Recovery (ORVR) compatibility standard (one module of the EVR program) did not change because ORVR compatible systems have been certified and available since 1998.

At that December 2002 hearing, stakeholders raised concerns that the amended EVR schedule could result in gasoline service stations having to upgrade equipment twice, once to meet ORVR compatibility and then a second time to meet full EVR standards. In Resolution 02-35, the Board directed staff to determine the adequacy of lead-time after certification of the first full EVR system in order to avoid the need to upgrade twice.

Since December 2002, several EVR standard effective dates have been delayed again as it has taken longer than anticipated to certify a full EVR system. The existing regulations allow the Executive Officer to allow continued installation of pre-EVR systems when EVR systems are not commercially available. Executive Order G-70-203 extended the EVR Phase II system deadline for new installations from April 1, 2004 to October 1, 2004. Executive Order G-70-205 further extended the EVR Phase II implementation date to January 1, 2005.

At the July 22, 2004 board meeting approving the unihose dispenser amendments, stakeholders again pointed out that the unavailability of EVR Phase II systems would lead to two equipment upgrades for full EVR compliance. Gasoline marketers requested a one-year extension for the ORVR compatibility requirement to April 2006 to allow station owners the option for only one equipment upgrade. The California Air Pollution Control Officers Association (CAPCOA) also testified in favor of an ORVR compatibility extension, primarily to facilitate orderly implementation of the ORVR compatibility requirement. CAPCOA suggested increments of progress to assure all stations will be in compliance by April 2006. Staff agreed to gather input from all stakeholders on the suggested ORVR extension, assess the economic and

environmental impacts of an ORVR compatibility delay and return to the Board in November with a recommendation.

Staff maintains that the EVR program is cost-effective even if two equipment upgrades are needed. This is because the costs for equipment upgrades for ORVR compatibility serve as a down payment for a full EVR system. Staff agrees that costs associated with permitting and station downtime will double if two upgrades are required, and avoiding this is desirable.

Staff recommends that the ORVR compatibility date be extended one year to April 1, 2006 to provide sufficient time for all stations to comply. An extension would also allow stations to install a full EVR Phase II system before the ORVR compatibility deadline, thus complying with both ORVR and EVR Phase II requirements with one station modification. Staff has calculated emission reductions of 1.9 tons/day would be foregone for one year, however, installation of full EVR systems in advance of the full EVR deadline could result in early emission reductions of up to 8.3 tons/day for 2006, 2007 and 2008.

Recommendation

Staff proposes to modify the regulations to extend the ORVR compatibility deadline to April 1, 2006 and amend other EVR regulation dates to be consistent with the extensions provided in Executive Orders G-70-203 and G-70-205. Because a full EVR Phase II system will be available soon, this action will provide station owners with the option to upgrade vapor recovery equipment once to achieve full EVR compliance.

Staff recommends that the Board adopt the following:

1. Amendments to the California Code of Regulations to incorporate the proposed certification and test procedures by reference (Appendix 1); and

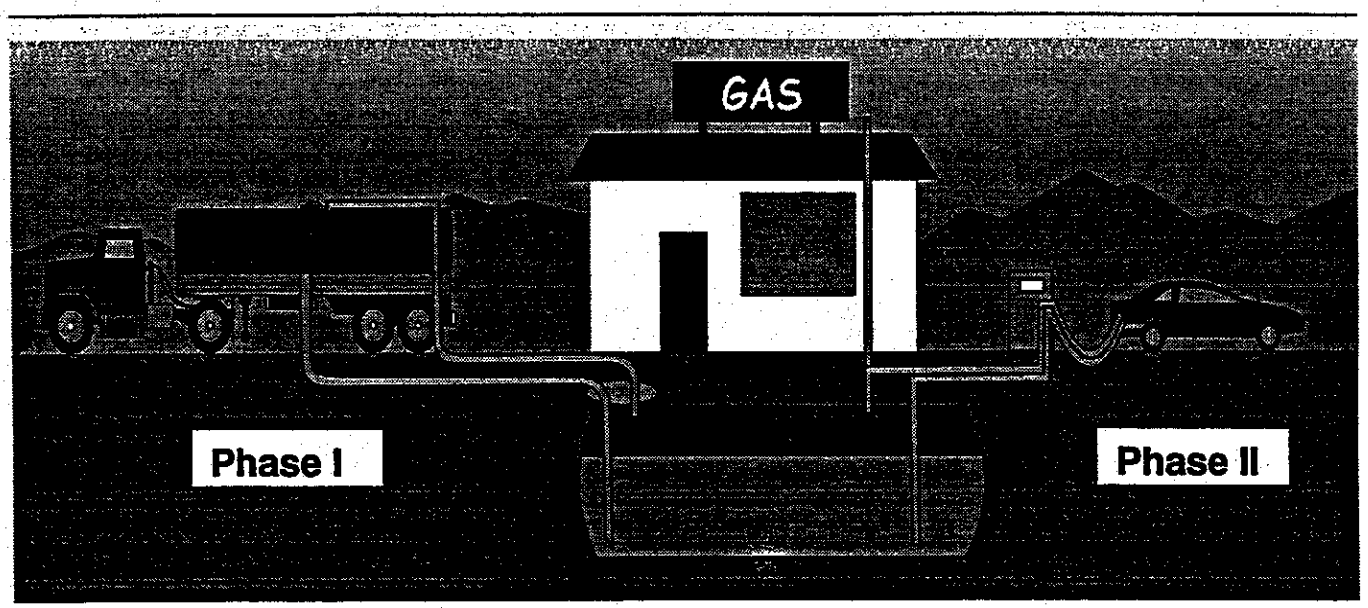
2. Amendments to the incorporated vapor recovery system certification procedure (Appendix 2).

II. BACKGROUND

A. Vapor Recovery Program Overview

Gasoline vapor emissions are controlled during two types of gasoline transfer. As illustrated in Figure II-1, Phase I vapor recovery collects vapors when a tanker truck fills the service station underground tank. Phase II vapor recovery collects vapors during vehicle refueling. The vapor recovery collection efficiency during both of these transfers is determined through certification of vapor recovery systems. Vapor recovery systems serve both as control for reactive organic gases (ROG) and as control for benzene, a toxic air contaminant.

Figure II-1
Phase I and Phase II Vapor Recovery Systems at Service Stations



The ARB and the air pollution control and management districts (districts) share implementation of the vapor recovery program. ARB staff certifies prototype Phase I and Phase II vapor recovery systems installed at operating station test sites. District rules and state law require that only ARB-certified systems be installed. District staff inspects and tests the vapor recovery system upon installation during the permit process and conducts regular inspections to check that systems are operating as certified.

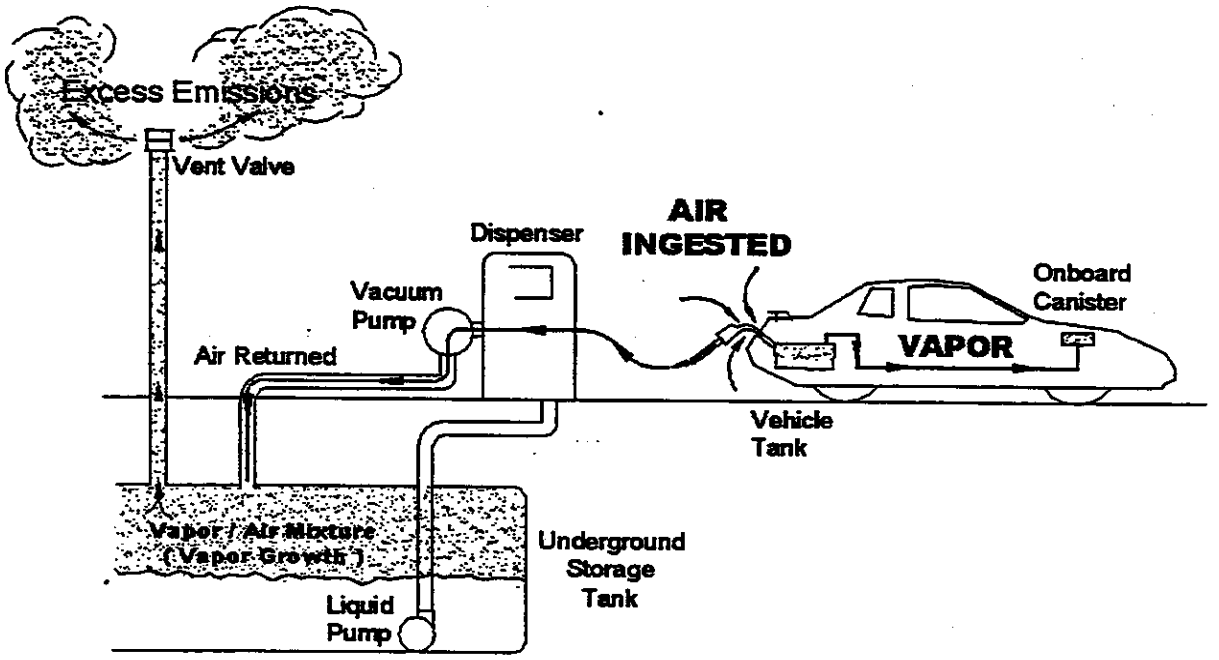
The vapor recovery requirements affect a multitude of stakeholders. These include the vapor recovery equipment manufacturers, gasoline marketers who purchase this equipment, contractors who install and maintain vapor recovery systems, and air pollution control districts who enforce vapor recovery rules. In addition, California certified systems are required by most other states and many countries.

B. ORVR Compatibility Requirement

Federal regulations require that vehicles be equipped with Onboard Refueling Vapor Recovery (ORVR) beginning in the 1998 model year and phased in over several years. ORVR works by routing gasoline vapors displaced during vehicle fueling to the onboard canister on the vehicle. For a non-ORVR vehicle, these displaced vapors are captured by the facility's Phase II vapor recovery system. Thus, ORVR and Phase II equipment seek to control the same emissions – the vapors displaced from the vehicle fuel tank during gasoline refueling.

ARB field tests have shown that fueling ORVR vehicles with some currently certified Phase II vapor recovery systems can lead to excess emissions. This is because some Phase II systems draw air into the underground storage tank (UST) during fueling of an ORVR vehicle. The air ingestion leads to vapor growth in the UST with corresponding fugitive and vent emissions of gasoline vapor shown as excess emissions in Figure II-2 below.

Figure II-2
Phase II Vapor Recovery System Incompatible with ORVR Vehicles



In recognition of the need for Phase II/ORVR compatibility, amendments to Health and Safety Code section 41954 (c)(1)(C), effective January 1, 2001, require that all Phase II systems be certified to be ORVR compatible.

The ORVR compatibility standard eliminates the excess emissions which can occur during fueling of an ORVR vehicle with a Phase II vapor recovery system that is not ORVR compatible. Compatibility is determined by verifying that the Phase II system can refuel ORVR vehicles without causing the vapor recovery system emissions to exceed the 0.38 lbs/1000 gallon performance standard.

Since 1998, ARB has certified several Phase II vapor recovery systems as being ORVR compatible. Systems were tested to verify that the Phase II system either 1) prevented ingestion of excess air when fueling an ORVR vehicle or 2) allowed air ingestion, but provided a method to control emissions related to vapor growth. The four ORVR systems that are commercially available are listed below.

Table II-1
Currently Certified ORVR Compatible Phase II Vapor Recovery Systems

Phase II System	ARB Executive Order & Approval Letters
Healy	G-70-186, G-70-191
Balance	G-70-52, Letter 03-04
Hirt	G-70-177-AA, Letter 03-06
Gilbarco/OPW*	G-70-204*

*anticipated certification by October 2004

C. EVR Emission Reductions

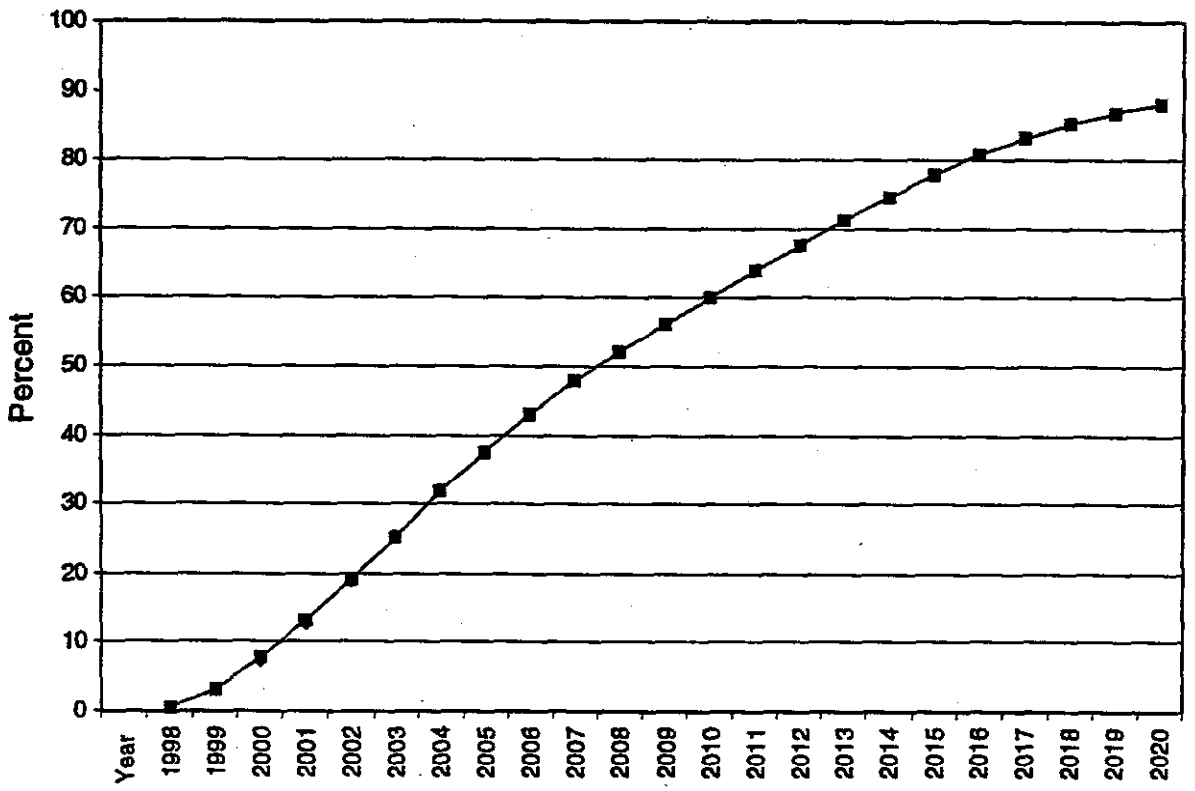
The EVR program will achieve 25.7 tons/day of ROG emission reductions by 2010. The EVR requirements can be characterized in six EVR modules. Module 1 contains the standards for EVR Phase I systems. Modules 2 through 5 comprise the EVR Phase II system requirements. Module 6 is for in-station diagnostics (ISD), which monitors the performance of the Phase I and Phase II systems. Table II-2 summarizes the emission reductions associated with each module to be achieved by 2010.

Table II-2
EVR Emission Reduction Summary

Module	Description	2010 ROG Reductions Statewide, tons/day
1	Phase I	5.5
2	Phase II	3.1
3	ORVR Compatibility	4.5
4	Liquid Retention	0.2
5	Spillage/Dripless Nozzle	3.9
6	In-Station Diagnostics	8.5
	Total	25.7

The emission reductions associated with ORVR compatibility vary for each year depending on the percentage of fuel dispensed to ORVR equipped vehicles. The predicted penetration of ORVR vehicles in the California fleet is provided in Figure II-3. This curve was developed using information on vehicle miles traveled obtained from the Department of Motor Vehicles. Details on the calculations are provided in Reference 1.

Figure II-3
Predicted ORVR Vehicle Penetration in California Vehicles



The ORVR vehicle penetration can be combined with emission factors developed from field tests to estimate annual emission reductions achieved through ORVR compatibility. The calculations originally described in the February 4, 2000 staff report (Reference 2) and updated in the EVR Technology Review Report (Reference 3) have been modified further as described below.

Previously, the ORVR emission calculations assumed that 55% of the state's gasoline throughput was dispensed at gasoline dispensing facilities (GDFs) with non-compatible vapor recovery systems. As of April 1, 2003, new installations have been required to have ORVR-compatible systems and some existing stations have already converted their vapor recovery systems to be ORVR compatible. The South Coast Air Quality Management District (SCAQMD) staff estimates that about two-thirds of the 3400

existing stations in the SCAQMD are ORVR compatible or in the process of converting to ORVR compatibility. If we assume that one-third of the existing stations statewide use assist systems that are not ORVR compatible and that these stations are estimated to dispense 40% of the state's gasoline throughput, then the emissions remaining due to ORVR incompatibility are 1.9 tons/day in 2005 as shown in Table II-3.

Table II-3
Estimated Excess Emissions due to Incompatibility of Phase II Vapor Recovery Systems Fueling ORVR Vehicles

Year	Percent of Vehicle Miles Traveled by ORVR Vehicles	Excess Emissions Calculated in 2002 (55% of throughput at non-ORVR compatible stations)	Excess Emissions Calculated in 2004 (40% of throughput at non-ORVR compatible stations)
1998	0.48	0.0	0.0
1999	3.19	0.2	0.1
2000	7.88	0.4	0.3
2001	13.27	0.8	0.6
2002	19.11	1.1	0.9
2003	25.11	1.6	1.2
2004	31.79	2.0	1.6
2005	**37.66**	**2.5**	**1.9**
2006	43.04	2.9	2.2
2007	47.84	3.3	2.6
2008	52.11	3.7	2.9
2009	56.15	4.1	3.2
2010	60.10	4.5	3.5

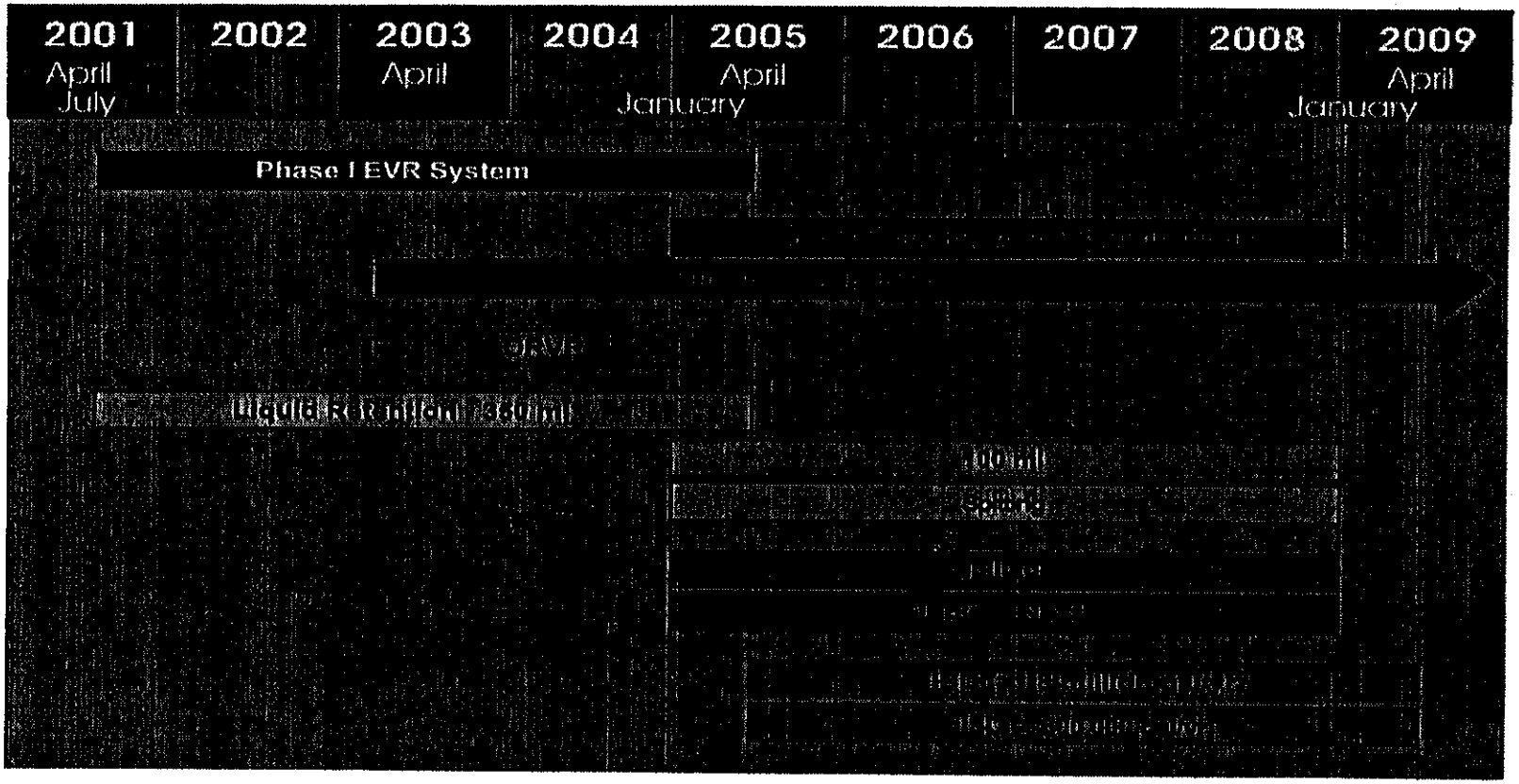
F. EVR Implementation Schedule

The EVR standards are being phased in over several years and apply both to new and existing facilities. New facilities must meet EVR requirements in effect at time of installation. Existing facilities may use equipment installed prior to the effective date of an EVR standard for a period of up to four years after the effective date. This is commonly referred to as the "4-year clock."

Figure II-1 shows the current EVR implementation timeline. The beginning of each colored bar shows the date when new stations must comply. The final compliance date for all facilities to meet a standard is the date at the end of the colored bar.

The current EVR timeline also reflects changes in EVR implementation dates provided by Executive Officer action in Executive Orders G-70-203 and G-70-205, which resulted in the delay of EVR implementation dates associated with Phase II vapor recovery to October 1, 2004 and January 1, 2005 respectively.

Figure II-1
Current EVR Timeline



Dotted box: time between start of 4-year clock and operative date
Start of solid bar: date required for new or modified facilities (operative date)
End of solid bar: date required for existing facilities (installed before start of bar)
Not required for dispensers installed before April 2003

E. Legal Authorities

Section 41954 of the Health and Safety Code (Appendix 3 contains a copy of section 41954) requires ARB to adopt procedures and performance standards for controlling gasoline emissions from gasoline marketing operations, including transfer and storage operations to achieve and maintain ambient air quality standards. This section also authorizes ARB, in cooperation with districts, to certify vapor recovery systems that meet the performance standards. Section 39607(d) of the Health and Safety Code (HSC) requires ARB to adopt test procedures to determine compliance with ARB and the districts' non-vehicular standards. State law (HSC section 41954) requires districts to use ARB test procedures or their equivalent for determining compliance with performance standards and specifications established by ARB.

To comply with state law, the Board adopted the certification and test procedures found in title 17, Code of Regulations, sections 94110 to 94015 and 94101 to 94165. These regulations reference procedures for certifying vapor recovery systems and test procedures for verifying compliance with performance standards and specifications.

F. Comparable Federal Regulations

There are no comparable federal regulations that certify gasoline vapor recovery systems for service stations; however, changes to ARB vapor recovery certification regulations may have a national impact. ARB certification is required by most other states that mandate the installation of vapor recovery systems in gasoline dispensing facilities.

III. RULE DEVELOPMENT PROCESS AND PUBLIC OUTREACH EFFORTS

The staff proposal was communicated to and discussed with Enhanced Vapor Recovery stakeholders through a public workshop, individual meetings, an EVR Advisory, ARB's web site, and a listserve via the internet.

A. Workshops

A workshop was held on August 19, 2004 in Sacramento. The workshop notice requested specific information regarding number of stations needing to upgrade to ORVR compatibility, time needed to complete the upgrade process, and effect of the proposed delay on vapor recovery equipment manufacturers. The workshop audio was broadcast over the internet and the workshop presentation posted on the vapor recovery webpage. Twenty-nine stakeholders attended the workshop and four e-mail comments were received from internet participants. The workshop attendees included representatives from air pollution control districts, equipment manufacturers, petroleum marketers and individuals who own and operate service stations.

B. Meetings

Staff has met with stakeholders on several vapor recovery issues in the past year. Meetings where the ORVR compatibility deadline was discussed are summarized below.

Table III-1
ORVR Compatibility Meetings Held in 2004

Stakeholder	Date(s)
American Petroleum Institute (API)	March 9, March 16, March 30
CA Independent Oil Marketers (CIOMA)	March 9, May 21
CAPCOA Vapor Recovery Committee	April 15, June 4, July 15
Healy Systems	February 4
Western States Petroleum Association (WSPA)	January 20, March 9, March 16, March 30, April 14, June 4

C. EVR Advisory

Advisory 327, entitled "Enhanced Vapor Recovery Implementation Update" and dated September 10, 2004, was provided to stakeholders through a mail-out, e-mail listserve and webpage posting. The advisory alerted affected parties that extensions to EVR implementation dates were to be considered at the November board meeting and comments were encouraged on the staff's proposal to be made available on October 1, 2004.

D. Internet

Stakeholders were encouraged to join the vapor recovery list-serve to receive electronic mail (e-mail) notifications when new materials are posted on the vapor recovery webpage (www.arb.ca.gov/vapor/vapor.htm). The workshop notices, agendas, and presentations, as well as the letters to the manufacturers are all available on the webpage. Stakeholders were encouraged to submit formal comments by letter, but they were also permitted and encouraged to address questions and comments to staff via e-mail.

IV. REASONS FOR AND SUMMARY OF PROPOSED AMENDMENTS OF THE CERTIFICATION PROCEDURE (CP-201)

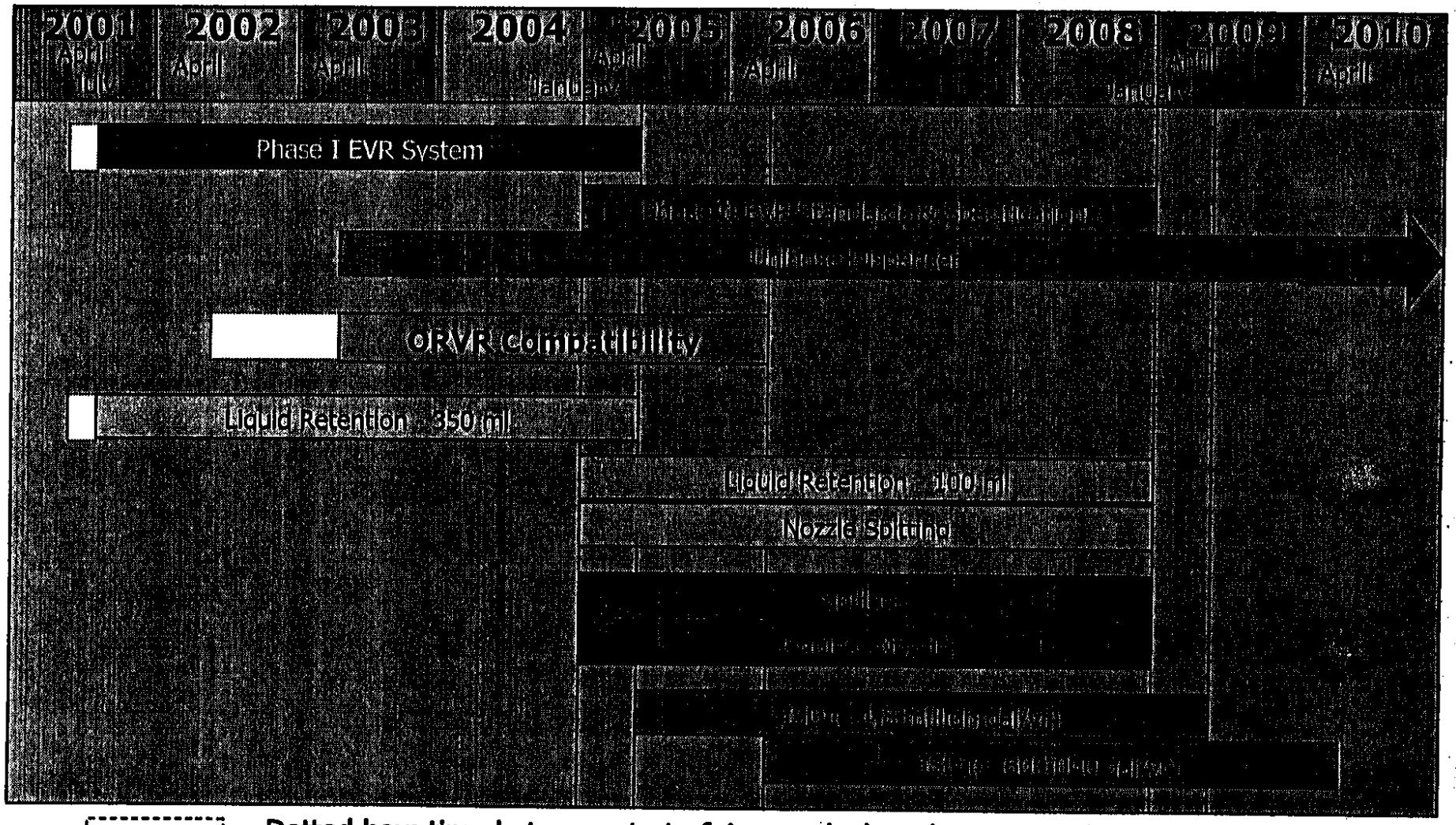
The proposed amendments will extend the ORVR compatibility requirement deadline for 12 months; from April 1, 2005 to April 1, 2006. This is 16 months after the expected certification of the first EVR Phase II system. Staff has concluded that 16 months is sufficient time for the estimated 3500 stations to upgrade either to an ORVR compatible system or a full EVR Phase II system.

The proposed amendments also formalize changes in effective and operative dates affected by ARB Executive Officer actions as described in Executive Orders G-70-203 and G-70-205. The proposal also changes the in-station diagnostics (ISD) effective date for medium throughput facilities to maintain the one-year timeframe after ISD is required for high throughput facilities. The ISD phase-in provides an opportunity to evaluate ISD system performance before full ISD implementation.

CP-201, "Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities," contains the EVR program operative dates. Staff proposes revisions to Table 2-1 of CP-201 as shown in Appendix 2. The proposed changes are summarized in the revised EVR timeline shown in Figure IV-1.

Certification of an EVR Phase II system has taken longer than staff had anticipated. As a result, many stations that have not yet made ORVR upgrades will not have the option of making one upgrade to their station which meets both ORVR and EVR requirements. Thus many stations will have to upgrade twice, once for ORVR by April 1, 2005, and again for EVR by April 1, 2009. The delay of the ORVR deadline by one year will allow station owners the choice of satisfying both ORVR and EVR requirements at one time, at a reduced cost and inconvenience. The rationale for this change is discussed in more detail below.

Figure IV-1 PROPOSED EVR TIMELINE



Dotted box: time between start of 4-year clock and operative date

Start of solid bar: date required for new or modified facilities (operative date)

End of solid bar: date required for existing facilities (installed before start of bar)

Not required for dispensers installed before April 2003

A. Time needed to Make Existing Stations ORVR compatible

Based on information gathered from districts, petroleum marketers and vapor recovery equipment manufacturers, staff has determined that 12 additional months are needed to make all stations in California compatible with fueling ORVR vehicles. This timeframe is based on the number of stations remaining to be upgraded, time necessary to choose systems and plan station upgrades, time needed to obtain construction, district and other necessary permits, time to obtain and schedule contractors and time to install compliant vapor recovery systems.

1. Number of stations to be upgraded

The US Department of Energy estimates there are 9,750 gasoline dispensing facilities statewide (Reference 4). Approximately 3400 (35%) are located in the South Coast Air Quality Management District (SCAQMD). The SCAQMD permitting staff estimates that 2000 of the GDFs have ORVR compatible systems, 300 are in the permit process to upgrade to ORVR compatible systems and 1100 have not yet submitted paperwork, but need to upgrade. This is consistent with the Western States Petroleum Association (WSPA) survey of four large air pollution control districts in California that indicates that 35-40% of the retail facilities are not ORVR compatible and conclude that approximately 3500 facilities statewide need ORVR compatibility upgrades (Reference 5).

2. Time to choose system, plan upgrade and prepare permit application

Gasoline marketers commented at the workshop that at least two months is needed after the first EVR Phase II system is certified for operators to review the certified system features, make decisions on which system (EVR or ORVR) is best for their facility, determine commercial availability of the system and prepare permit applications.

3. Time to obtain necessary permits

Station operators have commented that obtaining permits from air pollution control districts can vary from two weeks to over three months under normal conditions. These time periods could be longer if hundreds of stations are seeking permits at the same time.

4. Time to schedule contractors

Gasoline marketers are currently scheduling contractors for upgrading to EVR Phase I systems by the April 2005 deadline, as well as to conduct work for other agency requirements, such as UST work required by the State Water Resources Control Board. Although it appears that contractors remain available in southern California, one oil

company indicated that northern California contractors are currently experiencing backlogs. One contractor advised in August 2004 that jobs were scheduled through December 2004 and predicted a 6-8 month backlog by the end of August.

B. Previous Board Direction Regarding Avoiding Two Equipment Upgrades

During the comment period for the December 2002 EVR Technology Review amendments, gasoline marketers expressed concern that existing facilities may be forced to upgrade equipment twice; once by April 2005 to meet the ORVR compatibility deadline, and again by April 2007 to meet the full EVR requirements. In Resolution 02-35, the Board directed staff to:

> *"assess, following the initial certification of the first EVR Phase II system, the adequacy of the lead time to install complying certified EVR Phase II systems prior to the deadlines for complying with on-board refueling vapor recovery (ORVR) requirements. It is the intent of the Board that the assessment determine the adequacy of lead time in order to minimize the necessity that existing gasoline dispensing facilities (service stations or GDFs) will need to upgrade vapor recovery systems or equipment more than once in order to comply with both the EVR Phase II standards and specifications and ORVR. The Executive Officer and Board staff are directed to consult with the Districts, WSPA and other stakeholders in preparing the assessment and to report the findings to the Board within three months of the initial certification of the first EVR Phase II system."*

At the time of the December 2002 board meeting, staff was anticipating testing a full EVR system beginning in January 2003. Unfortunately, delays in the equipment manufacturers completing certification testing prevented having a certified EVR Phase II system available and installed by the adopted deadline of April 1, 2004. Because a system would not be commercially available at the regulation deadline, the Executive Officer extended the EVR Phase II deadline by 6 months to October 1, 2004 as allowed under section 19.2 of CP-201. The Executive Officer issued a second extension to January 1, 2005 as an EVR Phase II system was not commercially available by October 1, 2004.

The history of changes to the EVR Phase II system deadline and the effect on the time available between the EVR Phase II deadline and the ORVR deadline are provided in Table IV-1.

Table IV-1
History of Amendments to EVR Phase II System Deadlines

Action Taken	Adoption Date	ORVR Compatibility required for existing GDFs	EVR Phase II required for new GDFs	Time between ORVR deadline and required first EVR Phase II System
Board Approval 3/22/2000	2/1/2001	4/1/2005	4/1/2003	24 months
Board Approval 12/12/2002	3/7/2003*	4/1/2005	4/1/2004	12 months
EO Approval**	3/11/2004	4/1/2005	10/1/2004	6 months
EO Approval**	8/30/2004	4/1/2005	1/1/2005	3 months

*adopted via emergency regulation
** extended by ARB Executive Officer as per section 19.2 of CP-201 as certified EVR Phase II system not commercially available.

C. Risk Associated with Installing ORVR Compatible vs. Full EVR Systems

It is expected that the four certified ORVR Compatible Phase II systems available now will eventually be upgraded and certified as full EVR Phase II systems. However, there are no guarantees that these systems will eventually become certified to all EVR standards. Table IV-2 compares the currently available ORVR compatible systems and assesses the probability that the system will complete the additional steps needed to achieve full EVR compliance.

Table IV-2
Status of ORVR Compatible Systems Becoming Compatible with Full EVR Phase II Systems

ORVR System	Status Toward Full EVR	Additional Equipment to Convert ORVR system to Full EVR	Comments
Healy	Completed operational test and preparing Executive Order (without ISD). System with ISD completing testing	Nozzles, Clean Air Separator and ISD	Healy EVR Executive Order expected November 2004
OPW Membrane	Full EVR system sealed and under test	Nozzles and ISD	OPW/Gilbarco ORVR Certification anticipated October 2004
Balance	Application under review	Nozzles and ISD and possible processor	Processor may or may not be needed to meet pressure limits
Hirt	R&D site approved Application anticipated	Nozzles and ISD	

Gasoline marketers prefer to minimize the risk on their significant capital investment for upgrading vapor recovery equipment. The worst-case scenario would be to install an ORVR compatible system now and then have to replace the entire system in 4 years because the ORVR compatible system could not be modified to meet full EVR requirements. The Healy ORVR system is currently the lowest risk system, as the Healy EVR Phase II system has met all certification testing requirements and the Executive Order is being finalized. Stations that install a Healy ORVR compatible system now would need to update the Healy nozzles, add the Clean Air Separator and install ISD by 2008. The OPW Membrane is also likely to be part of a full EVR system. Stations currently operating with a Gilbarco VaporVac Phase II system can add the OPW membrane processor to achieve ORVR compatibility now, and add EVR nozzles and ISD systems by 2008 for full EVR compliance. Stations operating with balance systems will need EVR nozzles, ISD, and possibly a vapor processor for to meet full EVR. The Hirt system already meets pressure limits, and would need EVR nozzles and ISD to comprise a full EVR system.

D. Comparison of Costs for One vs. Two Upgrades

In the 2002 EVR Technology review, staff estimated that the total equipment and

installation costs to upgrade a station with 6 dispensers (12 fueling points) to full EVR Phase II and ISD compliance would be approximately $43,000 (Reference 3). The staff's analysis assumed only one upgrade would be needed. The data in Table IV-3 indicate that estimated costs associated with two system upgrades range from $38,800 to $50,800 depending on the system chosen. Thus, staff concludes that the two-step approach to full EVR compliance remains cost-effective. The cost assumptions and calculations are provided in Appendix 4. Note that staff's assumptions do not include equipment discounts from retail prices that are often available to station operators.

Table IV-3
Estimated Equipment and Installation Costs to Upgrade Gilbarco VaporVac Station with 12 Fueling Points (Unihose) to ORVR Compatibility and EVR in Two Steps

ORVR System	Estimated ORVR system conversion cost	Additional Equipment to Convert ORVR system to Full EVR	Additional EVR system conversion cost	Total cost for Two Upgrades
Healy	$16,800	EVR Nozzles, Clean Air Separator and ISD	$28,000	$44,600
OPW Membrane	$22,800	EVR Nozzles and ISD	$22,800	$45,600
Balance	$16,000	EVR Nozzles, ISD and possible processor	$22,800	$38,800
			$34,800 with processor	$50,800 with processor

Under staff's proposal, station operators would have the option of upgrading stations once to a full EVR Phase II system. The cost of converting to a Healy EVR Phase II system is estimated at approximately $40,700 for a station with six dispensers. The difference in cost from the two upgrades estimate is the cost to replace the ORVR nozzles with EVR nozzles estimated at approximately $4,000. Note that nozzles and hanging hardware (hoses, etc.) have a working life of approximately one to three years and thus would need to be replaced anyway.

Table IV-4
Estimated Equipment and Installation Costs to Upgrade Gilbarco VaporVac Station with 12 Fueling Points to Full EVR in One Step

EVR Phase II System	Estimated EVR system conversion cost
Healy with ISD	$40,700

Staff's analysis does not include costs associated with obtaining permits (estimated at $1500 in Reference 6) or loss of business associated with shutdown of the station during equipment installation. Staff recognizes that these costs are real and significant and would be minimized for one equipment upgrade to full EVR compliance.

E. Delay in Certifying the First EVR Phase II System

The Board recognized in March 2000 that many of the EVR standards are technology forcing. The EVR Technology Review Report presented to the Board in December 2002 provided evidence from ARB and equipment manufacturers that EVR standards could technically be met. The EVR amendments also provide stringent certification testing to address concerns regarding durability of pre-EVR systems. Systems seeking certification must be installed in operating service stations and pass many field tests. Real-world certification testing of vapor recovery equipment over a minimum six-month period shows that it is difficult for vapor recovery systems to maintain compliance with the EVR standards over the certification test period.

At the time of the December 2002 EVR Technology Review Board meeting, there were fourteen approved EVR Phase II research and development test sites where seven vapor recovery system manufacturers were collecting data to support their certification applications. On July 29, 2003, the first EVR Phase II site was sealed for the minimum six-month operational test. Since that time, one other EVR Phase II system has been sealed but has had difficulties in completing the operational test. At this writing, only the Healy EVR Phase II system has successfully made it through the certification operational test period.

V. ECONOMIC AND ENVIRONMENTAL IMPACTS

A. Economic Impact of Proposed Amendments

The proposed amendments will provide cost savings for station owners by providing an option to avoid two vapor recovery system upgrades to meet full EVR Phase II requirements. Cost savings are estimated to range from $1,500 to $22,000. The lower end of the range represents costs for two upgrades for the Healy EVR system as installation of the currently certified Healy ORVR system serves as a down payment towards a full Healy EVR system. The excess costs are due to permitting for the EVR upgrade to the Healy ORVR system. The upper end of the range could apply to a station that purchased a vapor processor for an ORVR system that was never certified to be part of a full EVR system. This station would need to replace the ORVR compatible system with a full EVR system by October 2008.

The extension of the ORVR compatibility requirement could provide additional cost savings to operators if more ORVR compatible or EVR certified systems are certified in the next year, providing a more competitive market and possibly reducing system prices.

Service station operators commented at the workshop that a combination of several factors in recent years has made staying in business difficult, especially for small business owners. These include increased energy costs, liability expenses, worker's compensation, health insurance and a possible future increase in the minimum wage. One station operator estimated that compliance costs for environmental regulations range from $20,000 to $80,000 every two years, not counting loss of business due to downtime.

The proposed amendments will affect vapor recovery equipment manufacturers in different ways. Manufacturers who have already certified ORVR compatible systems may be adversely affected by the delay in the ORVR deadline as it will delay product sales and allow more time for their competitors to certify ORVR compatible systems. Equipment manufacturers who have recently entered the ORVR compatible system certification process will benefit from the delay if they can get systems certified before the new ORVR deadline.

Environmental Impacts of Proposed Amendments

Staff's analysis shows that there would be some emission reductions forgone in 2005 due to the 12 month delay, but early implementation to full EVR systems would achieve more emission reductions that originally claimed in 2006, 2007 and 2008. The emission reductions lost in 2005 could be minimized if significant numbers of stations

are held to an earlier compliance date, as suggested by the CAPCOA increments of progress.

The emission reductions attributed to ORVR compatibility at the time of the 2002 EVR Tech Review were 4.5 tons/day of 2010 ROG emissions. These emissions assumed that 55% of the state's gasoline throughput was dispensed through the two main brands of assist systems. Recent data from districts suggest that 3500 of the 9750 stations in the state have one of these two assist systems (Gilbarco or Wayne) and still need ORVR compatible upgrades. If all of these stations were upgraded to full EVR systems by April 2006, the emission reductions would be 8.3 tons/day (includes ISD emission reductions) as shown in Table V-1. This "best-case" scenario would provide early emission reductions of 8.3 tons/day for 2006, 2007 and 2008. Note that actual "best case" emission reductions before 2010 would be slightly lower as emissions are based on total state gasoline throughput growth factors.

Table V-1
EVR Phase II and ISD 2010 ROG Emission Reductions by System Type*

Module	Description	Gilbarco ROG Reductions Statewide tons/day	Wayne ROG Reductions Statewide tons/day	ROG Reductions for Early EVR Implementation Statewide tons/day
2	Phase II	3.0	0.1	3.1
3	ORVR Compatibility	4.3	0.2	NA
4	Liquid Retention	0.1	0.0	0.1
5	Spillage/Dripless Nozzle	1.4	0.8	2.2
6	In-Station Diagnostics	1.9	1.0	2.9
	Total	10.6	2.1	8.3

* NOTE: Modules 2 and 3 emissions from ARB baseline and simulated ORVR field tests
Modules 4 and 5 emissions are prorated by system throughput
Module 6 emissions calculated using ARB-district audit results as per App. 3 of 2002 EVR Tech Review
Reductions are estimated based on Gilbarco and Wayne systems because those are the predominant assist systems used in California

VI. OUTSTANDING ISSUES

1. ORVR Compatibility Increments of Progress

The California Air Pollution Control Officers Association (CAPCOA) agrees that the April 1, 2005 ORVR compatibility deadline cannot reasonably be met and supports an extension through a change in ARB regulations. CAPCOA recommends that permitting and installation milestones be included in the regulation amendments to help reduce adverse air quality impacts resulting from the proposed delay and minimize compliance difficulties that may arise from a last minute crunch given the limited number of available vendors and contractors. Gasoline marketers associations, including the Western States Petroleum Association (WSPA) and California Independent Oil Marketers Association (CIOMA), endorse the proposed CAPCOA schedule (Reference 5). The CAPCOA schedule is provided in Appendix 5.

ARB staff also supports the CAPCOA proposal; however, there are legal reasons why the proposed CAPCOA schedule cannot be incorporated into the vapor recovery regulations. The air pollution control districts have the primary authority for regulation of stationary sources, which includes permit program requirements. The ARB's role is to set standards for vapor recovery systems and certify systems to those standards. The ARB does not have the legal authority to adopt timelines for district permitting activities.

Staff alerted stakeholders to the legal conflict at the August 19, 2004 workshop. At that time, CIOMA suggested that the CAPCOA schedule could be implemented using a Memorandum of Agreement (MOA). Concerns were raised regarding statewide uniformity if some parties did not commit to the MOA.

2. Extension Hurts Manufacturers of ORVR Compatible Systems

Staff expects opposition to the ORVR compatibility extension from vapor recovery system manufacturers that currently market ORVR compatible systems. However, only one manufacturer of balance system components has commented thus far in opposition to the proposed amendments. Healy Systems opposed the extension in testimony at the July 22, 2004 board meeting; however, Healy retracted their statements in comments at the August 19, 2004 workshop. Healy stated that, after further investigation, they agree that the time remaining before April 2005 is insufficient to upgrade the large number of stations that are currently incompatible with fueling ORVR vehicles.

VII. ALTERNATIVES CONSIDERED

We have considered as an alternative the option of not adopting the proposed vapor recovery amendments. Keeping the current EVR schedule would be detrimental, as it is likely that some service station operators would not have enough time to comply. Also, small business owners have commented that they would be most likely to face delays as stations owned by major oil companies have an advantage in securing equipment orders and contractors. In addition, operators wishing to conduct only one equipment upgrade to meet full EVR requirements will not have that option without the proposed amendments.

VIII. REFERENCES

1. April 16, 2002 ARB Memorandum from Joe Guerrero to George Lew regarding Updated ORVR Penetration Calculations

2. Staff Report: Initial Statement of Reasons for Proposed Amendments to the Vapor Recovery Certification and Test Procedures for Gasoline Loading and Motor Vehicle Gasoline Refueling at Service Stations, February 4, 2000, Air Resources Board

3. EVR Technology Review Report, October 2002, Monitoring and Laboratory Division, Air Resources Board

3. California Petroleum Profile at US Department of Energy website <http://tonto.eia.doe.gov/oog/info/state/ca.html>, visited on September 10, 2004

5. September 3, 2004 letter from Jay McKeeman of the California Independent Oil Marketers Association, Steve Arita of the Western States Petroleum Association, Will Woods of the Automotive Trade Organizations of California, Jim Lantry of the San Diego Service Station Coalition and Dennis DeCota of the California Service Station & Automotive Repair Association to Cindy Castronovo of the Air Resources Board regarding WSPA/CIOMA/AUTO-CA/SDSSC/CSSARA Comments on CARB ORVR Compatibility Extension Workshop held on August 19, 2004

6. January 30, 2004 letter from Jay McKeeman of California Independent Oil Marketers Association and Joe Sparano of Western States Petroleum Association to Diane Johnston of the Air Resources Board regarding Governor's retrospective review of regulations adopted, amended or repealed since January 6, 1999

7. Executive Order G-70-203 dated March 11, 2004 entitled "Modification of Enhanced Vapor Recovery Operative and Effective Dates relating to the Finding that EVR Phase II Vapor Recovery Systems are not Commercially Available"

8. September 1, 2004 letter from William V. Loscutoff enclosing Executive Order G-70-205 dated August 30, 2004 entitled "Modification of Enhanced Vapor Recovery Operative and Effective Dates relating to the Finding that EVR Phase II Vapor Recovery Systems are not Commercially Available"

Appendix 1

Proposed Amendments to Title 17, California Code of Regulations

PROPOSED REGULATION ORDER

Note: ~~Strikeout~~ indicates deleted text; underline indicates inserted text.

Amend Title 17, California Code of Regulations, section 94011 to read:

§ 94011. Certification of Vapor Recovery Systems of Dispensing Facilities.

The certification of gasoline vapor recovery systems at dispensing facilities (service stations) shall be accomplished in accordance with the Air Resources Board's CP-201, "Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities" which is herein incorporated by reference. (Adopted: December 9, 1975, as last amended ~~August 2, 2004~~ [date of amendment to be inserted].

The following test procedures (TP) cited in CP-201 are also incorporated by reference.

TP-201.1 – "Volumetric Efficiency for Phase I Systems" (Adopted: April 12, 1996, as last amended October 8, 2003)

TP-201.1A – "Emission Factor For Phase I Systems at Dispensing Facilities" (Adopted: April 12, 1996, as last amended February 1, 2001)

TP-201.1B – "Static Torque of Rotatable Phase I Adaptors" (Adopted: July 3, 2002, as last amended October 8, 2003)

TP-201.1C – "Leak Rate of Drop Tube/Drain Valve Assembly" (Adopted: July 3, 2002, as last amended October 8, 2003)

TP-201.1D – "Leak Rate of Drop Tube Overfill Prevention" (Adopted: February 1, 2001, as last amended October 8, 2003)

TP-201.1E – "Leak Rate and Cracking Pressure of Pressure/Vacuum Relief Vent Valves" (Adopted: October 8, 2003)

TP-201.2 – "Efficiency and Emission Factor for Phase II Systems" (Adopted: April 12, 1996, as last amended October 8, 2003)

TP-201.2A – "Determination of Vehicle Matrix for Phase II Systems" (Adopted: April 12, 1996, as amended February 1, 2001)

TP-201.2B – "Flow and Pressure Measurement of Vapor Recovery Equipment" (Adopted: April 12, 1996, as last amended October 8, 2003)

TP-201.2C – "Spillage from Phase II Systems" (Adopted: April 12, 1996, as last amended February 1, 2001)

TP-201.2D – "Post-Fueling Drips from Nozzle Spouts" (Adopted: February 1, 2001, as last amended October 8, 2003)

TP-201.2E – "Gasoline Liquid Retention in Nozzles and Hoses" (Adopted: February 1, 2001)

TP-201.2F – "Pressure-Related Fugitive Emissions" (Adopted: February 1, 2001, as last amended October 8, 2003)

TP-201.2G – "Bend Radius Determination for Underground Storage Tank Vapor Recovery Components" (Adopted: October 8, 2003)

TP-201.2H – "Determination of Hazardous Air Pollutants from Vapor Recovery Processors" (Adopted: February 1, 2001)

TP-201.2I – "Test Procedure for In-Station Diagnostic Systems" (Adopted: October 8, 2003)

TP-201.2J – "Pressure Drop Bench Testing of Vapor Recovery Components" (Adopted: October 8, 2003)

TP-201.3 – "Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities" (Adopted: April 12, 1996, as last amended March 17, 1999)

TP-201.3A – "Determination of 5 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities" (Adopted: April 12, 1996)

TP-201.3B - "Determination of Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities with Above-Ground Storage Tanks" (Adopted: April 12, 1996)

TP-201.3C – "Determination of Vapor Piping Connections to Underground Gasoline Storage Tanks (Tie-Tank Test)" (Adopted: March 17, 1999)

TP-201.4 – "Dynamic Back Pressure" (Adopted: April 12, 1996, as last amended July 3, 2002)

TP-201.5 – "Air to Liquid Volume Ratio" (Adopted: April 12, 1996, as last amended February 1, 2001)

TP-201.6 – "Determination of Liquid Removal of Phase II Vapor Recovery

Systems of Dispensing Facilities" (Adopted: April 12, 1996, as last amended April 28, 2000)

TP-201.6C – "Compliance Determination of Liquid Removal Rate" (Adopted: July 3, 2002)

TP-201.7 – "Continuous Pressure Monitoring" (Adopted: October 8, 2003)

NOTE: Authority cited: Sections 39600, 39601, 39607 and 41954, Health and Safety Code. Reference: Sections 39515, 41952, 41954, 41956.1, 41959, 41960 and 41960.2, Health and Safety Code.

Appendix 2

Proposed Amendments to the EVR Effective and Operative Dates

California Environmental Protection Agency

Air Resources Board

Vapor Recovery Certification Procedure

CP - 201

Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities

Adopted: December 9, 1975
Amended: March 30, 1976
Amended: August 9, 1978
Amended: December 4, 1981
Amended: September 1, 1982
Amended: April 12, 1996
Amended: April 28, 2000
Amended: February 1, 2001
Amended: June 1, 2001
Amended: July 25, 2001
Amended: July 3, 2002
Amended: March 7, 2003
Amended: July 1, 2003
Amended: October 8, 2003
Amended: July 22, 2004
Amended: _____

Note: The only portion of this procedure being amended is Table 2-1, the balance of the text remains as amended on July 22, 2004. The text is shown in ~~strikeout~~ to indicate text that is proposed for deletion and underline to indicate text that is proposed for additions. [Bracketed text] is not part of the proposed amendments.

Table 2-1
Effective and Operative Dates for
Performance Standards and Specifications

Performance Type	Requirement	Sec.	Effective Date	Operative Date
All Phase I Standards and Specifications	As specified in Table 3-1	3	April 1, 2001	July 1, 2001
ORVR Compatibility	Interaction When Refueling ORVR Vehicles Shall Meet the applicable Efficiency or Emission Standard, Including ORVR Penetrations to 80%	4.1, 4.4	April 1, 2002 ~~April 1, 2001~~	April 1, 2003
Nozzle Criteria	Post-Refueling Drips ≤ 3 drop/refueling	4.7	January 1, 2005[1] ~~April 1,2004~~	January 1, 2005[1] ~~April 1,2004~~
Liquid Retention	≤ 350 ml/1,000 gals.	4.8	April 1, 2001	July 1, 2001
Liquid Retention Nozzle Spitting	≤ 100 ml/1,000 gals. ≤ 1.0 ml /nozzle/fueling	4.8	January 1, 2005[1] ~~April 1,2004~~	January 1, 2005[1] ~~April 1,2004~~
Spillage (including drips from spout)	≤ 0.24 pounds/1,000 gallons	4.3	January 1, 2005[1] ~~April 1,2004~~	January 1, 2005[1] ~~April 1,2004~~
For GDF > 1.8 mil. gal/yr.	ISD Requirements	10	April 1, 2005[1] ~~April 1,2004~~	April 1, 2005[1] ~~April 1,2004~~
For GDF > 600,000 gal/yr.	ISD Requirements	10.1	April 1, 2006[1] ~~April 1,2004~~	April 1,2006[1] ~~April 1, 2004~~
Unihose	One Hose/Nozzle per Dispenser Side	4.11	Not applicable	April 1, 2003
All other Phase II Standards and Specifications	As specified in Tables 4-1 through 8-2.	4,5,6, 7,8	January 1, 2005[1] ~~April 1,2004~~	January 1, 2005[1] ~~April 1,2004~~

[1] These amendments formalize dates already extended by Executive Officer action in Executive Orders G-70-203 and G-70-205 pursuant to section 19.2.

Appendix 3

Vapor Recovery Health and Safety Code Statutes

H&S 41950 Vapor Recovery Systems for Stationary Gas Tanks

41950. (a) Except as provided in subdivisions (b) and (e), no person shall install or maintain any stationary gasoline tank with a capacity of 250 gallons or more which is not equipped for loading through a permanent submerged fill pipe, unless such tank is a pressure tank as described in Section 41951, or is equipped with a vapor recovery system as described in Section 41952 or with a floating roof as described in Section 41953, or unless such tank is equipped with other apparatus of equal efficiency which has been approved by the air pollution control officer in whose district the tank is located.

(b) Subdivision (a) shall not apply to any stationary tanks installed prior to December 31, 1970.

(c) For the purpose of this section, "gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds or greater.

(d) For the purpose of this section, "submerged fill pipe" means any fill pipe which has its discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank. "Submerged fill pipe," when applied to a tank which is loaded from the side, means any fill pipe which has its discharge opening entirely submerged when the liquid level is 18 inches above the bottom of the tank.

(e) Subdivision (a) shall not apply to any stationary tank which is used primarily for the fueling of implements of husbandry.

(Added by Stats. 1975, Ch. 957.)

H&S 41951 Definition of Pressure Tank

41951. A "pressure tank" is a tank which maintains working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere.

(Added by Stats. 1975, Ch. 957.)

H&S 41952 Definition of Vapor Recovery System

41952. A "vapor recovery system" consists of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such

hydrocarbon vapors and gases so as to prevent their emission into the atmosphere, with all tank gauging and sampling devices gastight except when gauging or sampling is taking place.

(Added by Stats. 1975, Ch. 957.)

H&S 41953 Definition of Floating Roof

41953. A "floating roof" consists of a pontoon-type or double-deck-type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank wall. The control equipment required by this section shall not be used if the gasoline or petroleum distillate has a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gastight except when gauging or sampling is taking place.

(Added by Stats. 1975, Ch. 957.)

H&S 41954 ARB Shall Certify Vapor Recovery Systems

41954. (a) The state board shall adopt procedures for determining the compliance of any system designed for the control of gasoline vapor emissions during gasoline marketing operations, including storage and transfer operations, with performance standards that are reasonable and necessary to achieve or maintain any applicable ambient air quality standard.

(b) The state board shall, after a public hearing, adopt additional performance standards that are reasonable and necessary to ensure that systems for the control of gasoline vapors resulting from motor vehicle fueling operations do not cause excessive gasoline liquid spillage and excessive evaporative emissions from liquid retained in the dispensing nozzle or vapor return hose between refueling events, when used in a proper manner. To the maximum extent practicable, the additional performance standards shall allow flexibility in the design of gasoline vapor recovery systems and their components.

(c) (1) The state board shall certify, in cooperation with the districts, only those gasoline vapor control systems that it determines will meet the following requirements, if properly installed and maintained:

(A) The systems will meet the requirements of subdivision (a).

(B) With respect to any system designed to control gasoline vapors

during vehicle refueling, that system, based on an engineering evaluation of that system's component qualities, design, and test performance, can be expected, with a high degree of certainty, to comply with that system's certification conditions over the warranty period specified by the board.

(C) With respect to any system designed to control gasoline vapors during vehicle refueling, that system shall be compatible with vehicles equipped with onboard refueling vapor recovery (ORVR) systems.

(2) The state board shall enumerate the specifications used for issuing the certification. After a system has been certified, if circumstances beyond the control of the state board cause the system to no longer meet the required specifications or standards, the state board shall revoke or modify the certification.

(d) The state board shall test, or contract for testing, gasoline vapor control systems for the purpose of determining whether those systems may be certified.

(e) The state board shall charge a reasonable fee for certification, not to exceed its actual costs therefor. Payment of the fee shall be a condition of certification.

(f) No person shall offer for sale, sell, or install any new or rebuilt gasoline vapor control system, or any component of the system, unless the system or component has been certified by the state board and is clearly identified by a permanent identification of the certified manufacturer or rebuilder.

(g) (1) Except as authorized by other provisions of law and except as provided in this subdivision, no district may adopt, after July 1, 1995, stricter procedures or performance standards than those adopted by the state board pursuant to subdivision (a), and no district may enforce any of those stricter procedures or performance standards.

(2) Any stricter procedures or performance standards shall not require the retrofitting, removal, or replacement of any existing system, which is installed and operating in compliance with applicable requirements, within four years from the effective date of those procedures or performance standards, except that existing requirements for retrofitting, removal, or replacement of nozzles with nozzles containing vapor-check valves may be enforced commencing July 1, 1998.

(3) Any stricter procedures or performance standards shall not be

implemented until at least two systems meeting the stricter performance standards have been certified by the state board.

(4) If the certification of a gasoline vapor control system, or a component thereof, is revoked or modified, no district shall require a currently installed system, or component thereof, to be removed for a period of four years from the date of revocation or modification.

(h) No district shall require the use of test procedures for testing the performance of a gasoline vapor control system unless those test procedures have been adopted by the state board or have been determined by the state board to be equivalent to those adopted by the state board, except that test procedures used by a district prior to January 1, 1996, may continue to be used until January 1, 1998, without state board approval.

(i) With respect to those vapor control systems subject to certification by the state board, there shall be no criminal or civil proceedings commenced or maintained for failure to comply with any statute, rule, or regulation requiring a specified vapor recovery efficiency if the vapor control equipment which has been installed to comply with applicable vapor recovery requirements meets both of the following requirements:

(1) Has been certified by the state board at an efficiency or emission factor required by applicable statutes, rules, or regulations.

(2) Is installed, operated, and maintained in accordance with the requirements set forth in the document certification and the instructions of the equipment manufacturer.

(Amended by Stats. 2000, Ch. 729, Sec. 14.)

References at the time of publication (see page iii):

Regulations:
17, CCR, sections 94006, 94010, 94011,
94012, 94013, 94014, 94015, 94148, 94149, 94150, 94151, 94152, 94153,
94154, 94155, 94156, 94157, 94158, 94159, 94160, 94163

H&S 41955 Certification Required by Other Agencies

41955. Prior to state board certification of a gasoline vapor control system pursuant to Section 41954, the manufacturer of the system shall submit the system to, or, if appropriate, the components

of the system as requested by, the Division of Measurement Standards of the Department of Food and Agriculture and the State Fire Marshal for their certification.

(Added by Stats. 1976, Ch. 1030.)

H&S 41956 Other Agencies to Adopt Rules for Certification

41956. (a) As soon as possible after the effective date of this section, the State Fire Marshal and the Division of Measurement Standards, after consulting with the state board, shall adopt rules and regulations for the certification of gasoline vapor control systems and components thereof.

(b) The State Fire Marshal shall be the only agency responsible for determining whether any component or system creates a fire hazard. The division shall be the only agency responsible for the measurement accuracy aspects, including gasoline recirculation of any component or system.

(c) Within 120 days after the effective date of this subdivision, the Division of Measurement Standards, shall, after public hearing, adopt rules and regulations containing additional performance standards and standardized certification and compliance test procedures which are reasonable and necessary to prevent gasoline recirculation in systems for the control of gasoline vapors resulting from motor vehicle fueling operations.

(Amended by Stats. 1981, Ch. 902.)

H&S 41956.1 Revision of Standards for Vapor Recovery Systems

41956.1. (a) Whenever the state board, the Division of Measurement Standards of the Department of Food and Agriculture, or the State Fire Marshal revises performance or certification standards or revokes a certification, any systems or any system components certified under procedures in effect prior to the adoption of revised standards or the revocation of the certification and installed prior to the effective date of the revised standards or revocation may continue to be used in gasoline marketing operations for a period of four years after the effective date of the revised standards or the revocation of the certification. However, all necessary repair or replacement parts or components shall be certified.

(b) Notwithstanding subdivision (a), whenever the State Fire

Marshal determines that a system or a system component creates a hazard to public health and welfare, the State Fire Marshal may prevent use of the particular system or component.

(c) Notwithstanding subdivision (a), the Division of Measurement Standards may prohibit the use of any system or any system component if it determines on the basis of test procedures adopted pursuant to subdivision (c) of Section 41956, that use of the system or component will result in gasoline recirculation.

(Amended by Stats. 1996, Ch. 426, Sec. 2.)

References at the time of publication (see page iii):

Regulations: 17, CCR, section 94011

H&S 41957 Division of Industrial Safety Responsibilities

41957. The Division of Occupational Safety and Health of the Department of Industrial Relations is the only agency responsible for determining whether any gasoline vapor control system, or component thereof, creates a safety hazard other than a fire hazard.

If the division determines that a system, or component thereof, creates a safety hazard other than a fire hazard, that system or component may not be used until the division has certified that the system or component, as the case may be, does not create that hazard.

The division, in consultation with the state board, shall adopt the necessary rules and regulations for the certification if the certification is required.

(Amended by Stats. 1981, Ch. 714.)

H&S 41958 Rules Shall Allow for Flexibility in Design

41958. To the maximum extent practicable, the rules and regulations adopted pursuant to Sections 41956 and 41957 shall allow flexibility in the design of gasoline vapor control systems and their components. The rules and regulations shall set forth the performance standards as to safety and measurement accuracy and the minimum procedures to be followed in testing the system or component for compliance with the performance standards.

The State Fire Marshal, the Division of Occupational Safety and

Health, and the Division of Measurement Standards shall certify any system or component which complies with their adopted rules and regulations. Any one of the state agencies may certify a system or component on the basis of results of tests performed by any entity retained by the manufacturer of the system or component or by the state agency. The requirements for the certification of a system or component shall not require that it be tested, approved, or listed by any private entity, except that certification testing regarding recirculation of gasoline shall include testing by an independent testing laboratory.

(Amended by Stats. 1982, Ch. 466, Sec. 72.)

H&S 41959 Certification Testing

41959. Certification testing of gasoline vapor control systems and their components by the state board, the State Fire Marshal, the Division of Measurement Standards, and the Division of Occupational Safety and Health may be conducted simultaneously.

(Amended by Stats. 1981, Ch. 714.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 94010, 94011, 94012, 94013

H&S 41960 Certification by State Agencies Sufficient

41960. (a) Certification of a gasoline vapor recovery system for safety and measurement accuracy by the State Fire Marshal and the Division of Measurement Standards and, if necessary, by the Division of Occupational Safety and Health shall permit its installation wherever required in the state, if the system is also certified by the state board.

(b) Except as otherwise provided in subdivision (g) of Section 41954, no local or regional authority shall prohibit the installation of a certified system without obtaining concurrence from the state agency responsible for the aspects of the system which the local or regional authority disapproves.

(Amended by Stats. 1996, Ch. 426, Sec. 3.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 94011, 94012, 94013

H&S 41960.1 Operation in Accordance with Standards

41960.1. (a) All vapor control systems for the control of gasoline vapors resulting from motor vehicle fueling operations shall be operated in accordance with the applicable standards established by the State Fire Marshal or the Division of Measurement Standards pursuant to Sections 41956 to 41958, inclusive.

(b) When a sealer or any authorized employee of the Division of Measurement Standards determines, on the basis of applicable test procedures of the division, adopted after public hearing, that an individual system or component for the control of gasoline vapors resulting from motor vehicle fueling operations does not meet the applicable standards established by the Division of Measurement Standards, he or she shall take the appropriate action specified in Section 12506 of the Business and Professions Code.

(c) When a deputy State Fire Marshal or any authorized employee of a fire district or local or regional firefighting agency determines that a component of a system for the control of gasoline vapors resulting from motor vehicle fueling operations does not meet the applicable standards established by the State Fire Marshal, he or she shall mark the component "out of order." No person shall use or permit the use of the component until the component has been repaired, replaced, or adjusted, as necessary, and either the component has been inspected by a representative of the agency employing the person originally marking the component, or the person using or permitting use of the component has been expressly authorized by the agency to use the component pending reinspection.

(Added by Stats. 1981, Ch. 902.)

H&S 41960.2 Maintenance of Installed Systems

41960.2. (a) All installed systems for the control of gasoline vapors resulting from motor vehicle fueling operations shall be maintained in good working order in accordance with the manufacturer' s specifications of the system certified pursuant to Section 41954.

(b) Whenever a gasoline vapor recovery control system is repaired or rebuilt by someone other than the original manufacturer or its authorized representative, the person shall permanently affix a plate to the vapor recovery control system that identifies the repairer or rebuilder and specifies that only certified equipment was used. In

addition, a rebuilder of a vapor control system shall remove any identification of the original manufacturer if the removal does not affect the continued safety or performance of the vapor control system.

(c) (1) The executive officer of the state board shall identify and list equipment defects in systems for the control of gasoline vapors resulting from motor vehicle fueling operations that substantially impair the effectiveness of the systems in reducing air contaminants. The defects shall be identified and listed for each certified system and shall be specified in the applicable certification documents for each system.

(2) On or before January 1, 2001, and at least once every three years thereafter, the list required to be prepared pursuant to paragraph (1) shall be reviewed by the executive officer at a public workshop to determine whether the list requires an update to reflect changes in equipment technology or performance.

(3) Notwithstanding the timeframes for the executive officer's review of the list, as specified in paragraph (2), the executive officer may initiate a public review of the list upon a written request that demonstrates, to the satisfaction of the executive officer, the need for such a review. If the executive officer determines that an update is required, the update shall be completed no later than 12 months after the date of the determination.

(d) When a district determines that a component contains a defect specified pursuant to subdivision (c), the district shall mark the component "Out of Order." No person shall use or permit the use of the component until the component has been repaired, replaced, or adjusted, as necessary, and the district has reinspected the component or has authorized use of the component pending reinspection.

(e) Where a district determines that a component is not in good working order but does not contain a defect specified pursuant to subdivision (c), the district shall provide the operator with a notice specifying the basis on which the component is not in good working order. If, within seven days, the operator provides the district with adequate evidence that the component is in good working order, the operator shall not be subject to liability under this division.

(Amended by Stats. 1999, Ch. 501, Sec. 1.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 94006, 94010, 94011

H&S 41960.3 Telephone Number for Reporting Problems

41960.3. (a) Each district which requires the installation of systems for the control of gasoline vapors resulting from motor vehicle fueling operations shall establish a toll free telephone number for use by the public in reporting problems experienced with the systems. Districts within an air basin or adjacent air basin may enter into a cooperative program to implement this requirement. All complaints received by a district shall be recorded on a standardized form which shall be established by the state board, in consultation with districts, the State Fire Marshal, and the Division of Measurement Standards in the Department of Food and Agriculture. The operating instructions required by Section 41960.4 shall be posted at all service stations at which systems for the control of gasoline vapors resulting from motor vehicle fueling operations are installed and shall include a prominent display of the toll free telephone number for complaints in the district in which the station is located.

(b) Upon receipt of each complaint, the district shall diligently either investigate the complaint or refer the complaint for investigation by the state or local agency which properly has jurisdiction over the primary subject of the complaint. When the investigation has been completed, the investigating agency shall take such remedial action as is appropriate and shall advise the complainant of the findings and disposition of the investigation. A copy of the complaint and response to the complaint shall be forwarded to the state board.

(Amended by Stats. 1986, Ch. 194, Sec. 1.)

H&S 41960.4 Operating Instructions

41960.4. The operator of each service station utilizing a system for the control of gasoline vapors resulting from motor vehicle fueling operations shall conspicuously post operating instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with vapor recovery nozzles utilized at the station and shall include a warning that repeated attempts to continue dispensing, after the system having indicated that the vehicle fuel tank is full, may result in spillage or recirculation of gasoline.

(Added by Stats. 1981, Ch. 902.)

H&S 41960.5 Nozzle Size Requirements

41960.5. (a) No retailer, as defined in Section 20999 of the Business and Professions Code, shall allow the operation of any gasoline pump from which leaded gasoline is dispensed, or which is labeled as providing leaded gasoline, unless the pump is equipped with a nozzle spout meeting the required specifications for leaded gasoline nozzle spouts set forth in Title 40, Code of Federal Regulations, Section 80.22(f)(1).

(b) For the purpose of this section, "leaded gasoline" means gasoline which is produced with the use of any lead additive or which contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon.

(Added by Stats. 1987, Ch. 592, Sec. 2.)

H&S 41960.6 Fuel Pump Nozzles

41960.6. (a) No retailer, as defined in subdivision (g) of Section 20999 of the Business and Professions Code, shall, on or after July 1, 1992, allow the operation of a pump, including any pump owned or operated by the state, or any county, city and county, or city, equipped with a nozzle from which gasoline or diesel fuel is dispensed, unless the nozzle is equipped with an operating hold open latch. Any hold open latch determined to be inoperative by the local fire marshal or district official shall be repaired or replaced by the retailer, within 48 hours after notification to the retailer of that determination, to avoid any applicable penalty or fine.

(b) For purposes of this section, a "hold open latch" means any device which is an integral part of the nozzle and is manufactured specifically for the purpose of dispensing fuel without requiring the consumer's physical contact with the nozzle.

(c) Subdivision (a) does not apply to nozzles at facilities which are primarily in operation to refuel marine vessels or aircraft.

(d) Nothing in this section shall affect the current authority of any local fire marshal to establish and maintain fire safety provisions for his or her jurisdiction.

(Added by Stats. 1991, Ch. 468, Sec. 2.)

H&S 41961 Fees for Certification

41961. The State Fire Marshal, the Division of Measurement Standards, and the Division of Occupational Safety and Health may charge a reasonable fee for certification of a gasoline vapor control system or a component thereof, not to exceed their respective estimated costs therefor. Payment of the fee may be made a condition of certification. All money collected by the State Fire Marshal pursuant to this section shall be deposited in the State Fire Marshal Licensing and Certification Fund established pursuant to Section 13137, and shall be available to the State Fire Marshal upon appropriation by the Legislature to carry out the purposes of this article.

(Amended by Stats. 1992, Ch. 306, Sec. 5. Effective January 1, 1993. Operative July 1, 1993, by Sec. 6 of Ch. 306.)

H&S 41962 Vapor Recovery Systems on Cargo Tank Vehicles

41962. (a) Notwithstanding Section 34002 of the Vehicle Code, the state board shall adopt test procedures to determine the compliance of vapor recovery systems of cargo tanks on tank vehicles used to transport gasoline with vapor emission standards which are reasonable and necessary to achieve or maintain any applicable ambient air quality standard. The performance standards and test procedures adopted by the state board shall be consistent with the regulations adopted by the Commissioner of the California Highway Patrol and the State Fire Marshal pursuant to Division 14.7 (commencing with Section 34001) of the Vehicle Code.

(b) The state board may test, or contract for testing, the vapor recovery system of any cargo tank of any tank vehicle used to transport gasoline. The state board shall certify the cargo tank vapor recovery system upon its determination that the system, if properly installed and maintained, will meet the requirements of subdivision (a). The state board shall enumerate the specifications used for issuing such certification. After a cargo tank vapor recovery system has been certified, if circumstances beyond control of the state board cause the system to no longer meet the required specifications, the certification may be revoked or modified.

(c) Upon verification of certification pursuant to subdivision (b), which shall be done annually, the state board shall send a verified copy of the certification to the registered owner of the tank vehicle, which copy shall be retained in the tank vehicle as evidence of certification of its vapor recovery system. For each system certified,

the state board shall issue a nontransferable and nonremovable decal to be placed on the cargo tank where the decal can be readily seen.

(d) With respect to any tank vehicle operated within a district, the state board, upon request of the district, shall send to the district, free of charge, a certified copy of the certification and test results of any cargo tank vapor recovery system on the tank vehicle.

(e) The state board may contract with the Department of the California Highway Patrol to carry out the responsibilities imposed by subdivisions (b), (c), and (d).

(f) The state board shall charge a reasonable fee for certification, not to exceed its estimated costs therefor. Payment of the fee shall be a condition of certification. The fees may be collected by the Department of the California Highway Patrol and deposited in the Motor Vehicle Account in the State Transportation Fund. The Department of the California Highway Patrol shall transfer to the Air Pollution Control Fund the amount of those fees necessary to reimburse the state board for the costs of administering the certification program.

(g) No person shall operate, or allow the operation of, a tank vehicle transporting gasoline and required to have a vapor recovery system, unless the system thereon has been certified by the state board and is installed and maintained in compliance with the state board's requirements for certification. Tank vehicles used exclusively to service gasoline storage tanks which are not required to have gasoline vapor controls are exempt from the certification requirement.

(h) Performance standards of any district for cargo tank vapor recovery systems on tank vehicles used to transport gasoline shall be identical with those adopted by the state board therefor and no district shall adopt test procedures for, or require certification of, cargo tank vapor recovery systems. No district may impose any fees on, or require any permit of, tank vehicles with vapor recovery systems. However, nothing in this section shall be construed to prohibit a district from inspecting and testing cargo tank vapor recovery systems on tank vehicles for the purposes of enforcing this section or any rule and regulation adopted thereunder that are applicable to such systems and to the loading and unloading of cargo tanks on tank vehicles.

(i) The Legislature hereby declares that the purposes of this section regarding cargo tank vapor recovery systems on tank vehicles

are (1) to remove from the districts the authority to certify, except as specified in subdivision (b), such systems and to charge fees therefor, and (2) to grant such authority to the state board, which shall have the primary responsibility to assure that such systems are operated in compliance with its standards and procedures adopted pursuant to subdivision (a).

(Amended by Stats. 1982, Ch. 1255, Sec. 2. Operative July 1, 1983, or earlier, by Sec. 27.5 of Ch. 1255.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 94014, 94015

Appendix 4

Cost Calculations

COST ASSUMPTIONS AND CALCULATIONS

I. Cost Assumptions for Table IV-3, Estimated Equipment and Installation Costs to Upgrade Gilbarco VaporVac Station with 12 Fueling Points (Unihose) to ORVR Compatibility and EVR in Two Steps

A. Healy ORVR Compatibility Conversion Costs (Source: Healy Systems):

Equipment Costs Per Dispenser	
2 ORVR nozzles @ $300 each	= $600
1 vapor pump, etc. @ $1670 each	= $1,670
1 dispenser-related equipment @ $200 each	= $200
Total Equipment Costs/Dispenser	= $2,470
Installation Cost Per Dispenser	= $300
Total Healy ORVR Equipment and Installation Costs/Dispenser	= $2,770
Total Cost for 12 Fueling Points (6 unihose dispensers)	**= $16,620**

B. OPW Membrane ORVR Compatibility Conversion Costs (Source: OPW)

Equipment Cost per Facility	= $18,800
Installation Cost per Facility	= $ 4,000
Total OPW ORVR Equipment and Installation Cost/Facility	**= $22,800**

C. Balance ORVR Compatibility Conversion Costs (Reference 6 and Healy):

Equipment Costs Per Dispenser	
2 balance nozzles @ $200 each	= $400
2 sets hoses, etc. @ $230 each set	= $460
1 balance retrofit kit @ $1400 each	= $1400
Total Equipment Costs/Dispenser	= $2,260
Installation Cost Per Dispenser	= $400
Total balance ORVR Equipment and Installation Costs/Dispenser	= $2,660
Total Cost for 12 Fueling Points (6 unihose dispensers)	**= $15,960**

D. Healy EVR Conversion Costs (Healy):

Equipment Costs Per Dispenser		
2 EVR nozzles @ $315 each	=	$630
Total Equipment Costs/Dispenser	=	$630
Installation Cost Per Dispenser	=	$50
Total Healy ORVR Equipment and Installation Costs/Dispenser	=	$680
Total Dispenser Cost for 12 Fueling Points (6 unihose)	=	**$4,080**
Equipment Cost for Clean Air Separator	=	$6900
Installation Cost for Clean Air Separator	=	$2000
Total Cost for Clean Air Separator per Facility	=	**$8,900**

E. OPW EVR Conversion Costs (ARB estimate):

Equipment Costs Per Dispenser		
2 EVR nozzles @ $350 each	=	$700
2 sets hoses, etc. @ $260 each set	=	$520
Total Equipment Costs/Dispenser	=	$1220
Installation Cost Per Dispenser	=	$75
Total OPW EVR Equipment and Installation Costs/Dispenser	=	$1,295
Total Dispenser Cost for 12 Fueling Points (6 unihose)	=	**$7,770**

F. Balance EVR Conversion Costs (ARB estimate):

Equipment Costs Per Dispenser		
2 EVR nozzles @ $350 each	=	$700
2 sets hoses, etc. @ $260 each set	=	$520
Total Equipment Costs/Dispenser	=	$1220
Installation Cost Per Dispenser	=	$75
Total Healy ORVR Equipment and Installation Costs/Dispenser	=	$1,295
Total Dispenser Cost for 12 Fueling Points (6 unihose)	=	**$7,770**
Equipment Cost for balance processor	=	$10,000
Installation Cost for balance processor	=	$2000
Total Cost for balance processor per Facility	=	**$12,000**

EVR Conversion Cost Summary

ORVR System	Equipment to Convert to EVR	Processor	ISD*	EVR Nozzles & Hoses	TOTAL
Healy	Add Healy processor, ISD & Healy EVR nozzles	$8,900	$15,000	$4,080	**$27,980**
OPW Membrane	Add ISD & EVR nozzles	NA	$15,000	$7,770	**$22,770**
balance	Add processor, ISD & EVR balance nozzles	$12,000	$15,000	$7,770	**$34,770**

*ISD costs for station with 6 dispensers from 2002 EVR Technology Review

II. Cost Assumptions for Table IV-3, Estimated Equipment and Installation Costs to Upgrade Gilbarco Assist Station with 12 Fueling Points (Unihose) to EVR Phase II Compliance in One Step

A. Healy EVR Conversion Costs (Source: Healy Systems):

Equipment Costs Per Dispenser
2 EVR nozzles @ $315 each = $630
1 vapor pump, etc. @ $1500 each = $1,670
1 dispenser-related equipment @ $200 each = $200
Total Equipment Costs/Dispenser = $2,500

Installation Cost Per Dispenser = $300

Total Healy ORVR Equipment and Installation Costs/Dispenser = $2,800
Total Cost for 12 Fueling Points (6 unihose dispensers) = $16,800

Equipment Cost for Clean Air Separator = $6900
Installation Cost for Clean Air Separator = $2000
Total Cost for Clean Air Separator per Facility = **$8,900**

EVR	Equipment to Convert to EVR	Dispenser Modifications	Clean Air Separator	ISD*	TOTAL
Healy	Dispenser modifications, processor, ISD & Healy EVR nozzles	$16,800	$8,900	$15,000	**$40,700**

Appendix 5

CAPCOA Proposed Implementation Schedule

ORVR Compliance Schedule as suggested in July 20, 2004, letter Signed by Larry Greene, CAPCOA President

Proposed Schedule for Modifying Assist Phase II Systems to be Compatible with Vehicles Equipped with On-board Refueling Vapor Recovery (ORVR)

1. By February 1, 2005, each gasoline dispensing facility (GDF) owner subject to the ORVR retrofit requirements must submit a complete application showing how compliance with the ORVR requirements will be met and permit fees to the district for each affected GDF.

   (a) A GDF owner of 10 or less affected GDFs within a district shall provide as part of each application a compliance plan showing that construction at the GDF will be completed and the GDF will have successfully passed all applicable performance tests by March 1, 2006. A construction schedule shall be submitted for each affected GDF.

   (b) A GDF owner of more than 10 affected GDFs within a district shall provide as part of the application a compliance plan showing the following:

      (i) Construction will be completed and the GDF will have successfully passed all applicable performance tests for 40% or more of the GDFs and the district notified in writing by no later than 120 days after the construction authorization is issued or August 1, 2005, whichever is later.

      Construction will be completed and the GDF will have successfully passed all applicable performance tests for an additional 30% or more of the GDFs and the district notified in writing by no later than 120 days after the construction authorization is issued or December 1, 2005, whichever is later.

      Construction will be completed and the GDF will have successfully passed all applicable performance tests for the remaining 30% of the GDFs and the district notified in writing by no later than 120 days after the construction authorization is issued or April 1, 2006, whichever is later.

   A compliance plan shall be submitted for each affected GDF.

2. Not more than 30 days after the district issues the construction authorization, the GDF owner shall sign a contract with the contractor who will install the ORVR compatible system in accordance with the compliance plan.

3. The GDF shall comply with the compliance plan submitted to the district.