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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment:

Proposed Amended Rule 461 – Gasoline Transfer and Dispensing

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PREFACE

This document constitutes the Final Environmental Assessment (EA) for the Proposed Amended Rule 461 – Gasoline Transfer and Dispensing. The Draft EA was released for a 30-day public review and comment period from January 22, 2008 to February 20, 2008. One comment letter was received from the public and is included with a response to the comment in Appendix D.

To ease in identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~striketrough~~. PAR 461 has been revised subsequent to the release of the Draft EA for public review and comment. Brief summaries of the primary changes made to PAR 461 are presented in the following bulleted items.

- Implementation of Phase II vapor recovery requirements for E-85 fuel would be delayed to April 1, 2012.
- Implementation of Phase II enhanced vapor recovery (EVR) for non-retail gasoline dispensing facilities (GDFs) into fleets that are equipped with on-board refueling vapor recovery (ORVR) vehicles or emergency vehicles has been delayed from April 1, 2009 to April 1, 2012.
- An alternative to the compliance plan has been added to PAR 461 that would allow existing facility owners/operators to submit permits to construct and operate by September 1, 2008, for installation of CARB Phase II EVR equipment by April 1, 2009 instead of submitting a compliance plan. The compliance plan alternative requires the application to include application dates for other applicable regulatory agencies, equipment order, installation contract, equipment installation and equipment testing. A signed declaration that the owner/operator of the gasoline transfer and dispensing facility understands that the facility would not be allowed to dispense gasoline with a CARB certified Phase II EVR system on or after April 1, 2009 would be required.
- A compliance plan option has been added for facilities that would permanently cease the dispensing of gasoline before April 1, 2009. The compliance plan includes a declaration acknowledging a violation for each and every day the gasoline transfer and dispensing facility operators continue operating on or after April 1, 2009.

The first two items added to PAR 461 were requested by EPA and CARB and certain non-retail GDF operators. CARB and EPA have asked SCAQMD to exempt E-85 fuel and non-retail GDFs that dispense gasoline into fleet that are equipped with ORVR vehicles or emergency vehicles. There are currently no CARB certified systems that would meet the Phase II vapor recovery requirements for E-85. Since these two options are considered part of CARB's Phase II EVR requirements, they do not change the proposed project's objectives. PAR 461 is more stringent because it does not provide a full exemption for these two categories, but provides sunset dates that will allow additional time to control equipment vendors and CARB staff to certify new control systems and SCAQMD staff to evaluate whether the two exemptions are needed. The delayed dates would not only reduce the amount of VOC reductions expected by CARB, but would also delay potential construction emissions until April 1, 2012. The number of E-85 facilities is expected to be low; and since only 15 percent of E-85 fuel consists of

gasoline, the VOC reductions from gasoline at E-85 dispensing facilities would be small. There are 1,200 non-retail facilities, but not all would qualify as non-retail GDFs that dispense gasoline into fleets that are equipped with ORVR. SCAQMD staff did not take additional credit for VOC reductions under PAR 461. While the delayed dates may affect the overall number of facilities that may require construction and could affect daily construction; the adverse construction impact estimates in the EA are conservative and the modifications would only reduce the number of facilities that may potentially require construction activities. Since, the modifications would only reduce adverse impacts from construction; emissions in the EA are considered to be conservative. Therefore, these changes would not affect the overall conclusions in the Draft EA.

The last two modifications would be modifications or alternatives to the compliance plan requirements. Since the modifications would still include milestone dates to ensure compliance with CARB Phase II EVR requirements, there would be no adverse impacts to any environmental area.

None of the modifications alter any conclusions reached in the Draft EA, nor provide new information of substantial importance relative to the draft document. As a result, these minor revisions do not require recirculation of the document pursuant to CEQA Guidelines §15073.5. This document constitutes the Final EA for 461 – Gasoline Transfer and Dispensing.

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CHAPTER 1 - PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Objective

Project Background

Affected Facilities

Project Description

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin (collectively known as the “district”). By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating attainment of all federal and state ambient air quality standards for the district². Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP³. The 2007 AQMP concluded that major reductions in criteria pollutant emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone, particulate matter with an aerodynamic diameter of 10 microns or less (PM10) and particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5). Ozone, a criteria pollutant, is formed when VOCs react with NOx in the atmosphere and has been shown to adversely affect human health. VOC emissions also contribute to the formation of PM10 and PM2.5. The federal one-hour and eight-hour ozone standards were exceeded by all four counties and in the Salton Sea Air Basin in 2006. The Central San Bernardino Mountain area recorded the greatest number of exceedences of the eight-hour state standard (96 days), and eight-hour federal standard (59 days) and health advisory days (five days). The greatest number of federal one-hour exceedences (10 days) was recorded in the Santa Clarita Valley area. The greatest number of exceedences of the one-hour state standard (76 days) was recorded in the Perris Valley area. Altogether the South Coast Air Basin exceeded the federal one-hour standard on 35 days, the federal eight-hour standard on 86 days, the state one-hour standard on 102 days, and the state eight-hour standard on 121 days in 2006.

Proposed amended Rule (PAR) 461 would assist in the reduction of ozone by codifying the California Resources Board’s Phase II Enhanced Vapor Recovery (EVR), as required under State law. CARB’s EVR regulations would go into effect regardless of whether or not PAR 261 is adopted. The primary effect of PAR 461 would encourage early implementation of the Phase II EVR regulation.

CARB’s Phase II EVR regulation requires all gasoline dispensing facilities (GDFs) with underground storage tanks (USTs) in the district to implement Phase II EVR on or before April 1, 2009. Approximately 4,500 GDFs in the district and 13,000 GDFs statewide will need to upgrade to EVR Phase II vapor recovery by April 1, 2009. The large number of GDFs needing to upgrade their vapor recovery equipment within the next 12 months will require a concentrated effort by the GDFs, certified installation and testing contractors and regulatory agencies. Proper timing, commitment and follow-up are critical to meeting the deadline.

The EVR substantiates the Phase II emissions reduction and vapor recovery efficiency. It addresses thoroughly the durability and reliability issues of the vapor recovery components by extending the test requirements during the certification. Additionally, CARB’s Phase II EVR regulation limits the certification to four years with the renewal contingent on successfully

¹ The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).

² Health & Safety Code, §40460 (a).

³ Health & Safety Code, §40440 (a).

addressing problems that have occurred during the previous four-year period. PAR 461 would also enhance rule clarity and enforceability in several areas including contractor certification, approved tester accountability, and compliance testing.

PAR 461 would require the owner/operator of any existing GDF that failed to complete and demonstrate compliance with Phase II EVR on or before October 1, 2008, to submit a compliance plan and associated fees by October 1, 2008. The objectives of the compliance plan are to outline the increments of progress of Phase II EVR implementation and to assure compliance with the CARB deadline of April 1, 2009. The compliance plan shall specify the increments of progress necessary to meet the compliance date. Alternatively, the owner/operator of any existing GDF who submits by September 1, 2008, a complete application for a permit to construct and operate a CARB certified Phase II EVR system that demonstrates that the installation and testing of the system will occur on or before April 1, 2009, will not have to submit the compliance plan.

PAR 461 includes a new modification to delay the implementation of Phase II requirements for equipment dispensing E85 until April 1, 2012. This will allow time for CARB to certify EVR systems for the transfer and dispensing of E85. Implementation of Phase II EVR for non-retail gasoline dispensing facilities (GDFs) into fleets that are equipped with on-board refueling vapor recovery (ORVR) vehicles or emergency vehicles has also been delayed from April 1, 2009 to April 1, 2012.

PAR 461 would require that all contractors installing, modifying or repairing any CARB certified Phase II EVR system or components to have successfully completed the applicable manufacturer and the International Code Council (ICC) training programs, or any equivalent state certification program that may be developed in the future for the replacement of components. The requirement for obtaining relevant certification shall take effect six months after such tests certification becomes available. This proposed amendment is needed to increase enforceability and ensure emissions reductions when using of third party testers who are certified, provide consistency through a statewide certification process and ensure that testers are certified under the latest requirements and standards.

PAR 461 would confirm the integrity of the new or altered vapor recovery systems prior to operations by requiring the applicable performance tests be conducted prior to dispensing gasoline into motor vehicles. It would also address the concerns of vapor recovery testers concerning the reverification tests schedules. The proposed amendments offer flexible reverification test schedules set on the months (not the days) of the performance schedule in six or twelve month intervals based on the maximum throughput of the GDFs.

PAR 461 would improve the accountability of the testers, installers and repairers of the vapor recovery systems, and enhance the clarity and the enforceability of the rule.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PAR 461 is a discretionary action, which has potential for resulting in direct or indirect change to the environment and, therefore, is considered a “project” as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the proposed project and

has prepared this ~~draft~~Final Environmental Assessment (EA) with no significant adverse impacts pursuant to its Certified Regulatory Program. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110, SCAQMD has prepared this ~~draft~~Final EA.

CEQA and Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this ~~draft~~Final EA to address the potential adverse environmental impacts associated with the proposed project. The ~~draft~~Final EA is a public disclosure document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of the proposed project; and, (b) be used as a tool by decision makers to facilitate decision making on the proposed project.

SCAQMD's review of the proposed project shows that the proposed project would not have a significant adverse effect on the environment. Therefore, pursuant to CEQA Guidelines §15252, no alternatives or mitigation measures are required to be included in this ~~draft~~Final EA. The analysis in Chapter 2 supports the conclusion of no significant adverse environmental impacts.

The Draft EA was released for a 30-day public review and comment period from January 22, 2008 to February 20, 2008. One comment letter was received from the public and is included with a response to the comment in Appendix D. The comment states that the commentator has not comments and, therefore, does not alter any conclusions reached in the Draft EA, nor provide new information of substantial importance relative to the Draft EA. As a result, the Draft EA did not require recirculation pursuant to CEQA Guidelines §15073.5.

PROJECT LOCATION

PAR 461 would affect industrial and commercial gasoline transfer and dispensing facilities located throughout the SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of 10,473 square miles, consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the district, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal non-attainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).



Figure 1-1
Boundaries of the South Coast Air Quality Management District

PROJECT OBJECTIVE

The objective of PAR 461 is to codify CARB's Phase II EVR regulation, which is required under state law. Further, PAR 461 would encourage timely implementation of Phase II EVR requirements. The EVR regulation requires all gasoline dispensing facilities (GDFs) with underground storage tanks (USTs) in the district to implement Phase II EVR on or before April 1, 2009. PAR 461 would confirm the integrity of the new or altered vapor recovery systems prior to operations by requiring that applicable performance tests be conducted prior to dispensing gasoline into motor vehicles, address the complaints of vapor recovery testers concerning the reverification tests schedules, and improve the accountability of the testers, installers and repairers of vapor recovery systems.

PROJECT BACKGROUND

Rule 461 was adopted on January 9, 1976, to regulate gasoline vapor emissions into the atmosphere from GDFs. The rule has been amended 17 times to enhance the efficiencies of the vapor recovery systems and rule enforceability. The last amendment took place on June 3, 2005, and aimed to implement California Health and Safety Code Section 40724, which requires best available control technology for agricultural GDFs.

The GDFs emit vapors that contain volatile organic compounds (VOCs) and toxic air contaminants (TACs) such as benzene, toluene and xylene. These emissions are regulated by the CARB's EVR regulations and the SCAQMD Rule 461 – Gasoline Transfer and Dispensing. GDF's are the second largest VOC emission source category under the SCAQMD's regulatory

authority, following architectural coatings. VOC components react in the atmosphere photochemically to form several secondary air pollutants including ozone, a major ingredient of smog.

Gasoline vapor recovery requirements were adopted by CARB in 1974. Vapor recovery includes both Phase I and Phase II vapor recovery systems. The Phase I vapor recovery system recovers gasoline vapor generated during the transfer of gasoline from a tank truck to the GDF storage tank (bulk drop). The Phase II vapor recovery system recovers gasoline vapor generated during the refueling of motor vehicles and from the storage of gasoline at the GDF. The requirements for vapor recovery systems are defined in executive orders issued by CARB for the specific systems, which establish 95 percent control efficiency for the vapor recovery systems. The vapor recovery requirements were subsequently amended due to changes in the equipment and the maintenance requirements to maintain the required efficiency.

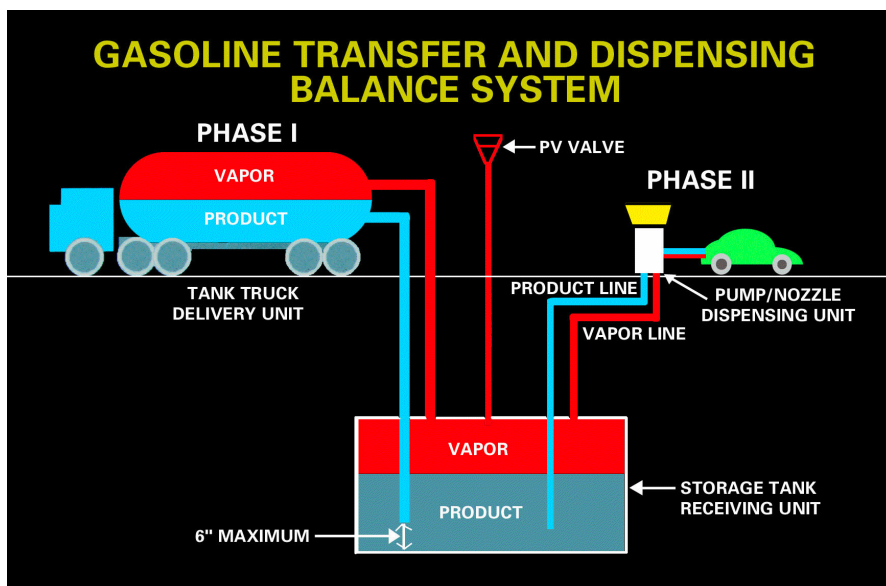
Gasoline vapor recovery technologies include both the balance and the vacuum assist systems. The balance system operates on the principle of vapor displacement during vehicle refueling. It uses the slight pressure that is created in the vehicle fuel tank by incoming gasoline liquid and the slight vacuum created in the underground storage tank by the departing gasoline liquid to pull the vapor out of the vehicle tank and transfer it to the underground storage tank, as illustrated in Figure 1-2. The balance system requires a tight seal between the faceplate of the nozzle and the vehicle fillpipe.

The vacuum assist system utilizes pressure inducing device, such as a vacuum pump or vapor collection unit, to enable the nozzle to capture vapor from the vehicle fueling tank during vehicle refueling and create the flow of vapor back to the underground storage tank. Unlike the balance system, a tight seal at the nozzle fillpipe interface is not necessary for vapor recovery. Figure 1-3 represents the vacuum assist vapor recovery system. The effectiveness of a vacuum assist system depends on its ability to maintain the ratio of the collected vapor to the dispensed gasoline liquid (V/L) within the specification of the executive order of the system.

In 1999, several field inspections and audits conducted jointly by CARB and several air districts' staff have uncovered several problems with the performance and durability of the vapor recovery components at the GDFs. As a result, CARB staff acknowledged the need for expanding the certification duration of the vapor recovery system and enhancing the tests requirements during the certification procedure (CP-201) to thoroughly address the vapor recovery concerns which triggered the adoption of the EVR regulations.

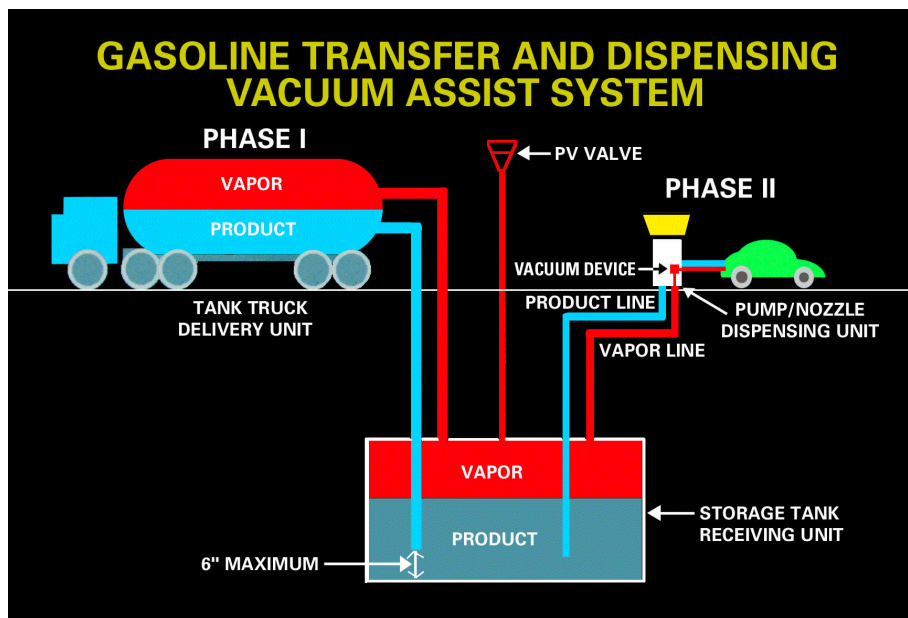
The EVR regulations became state law on April 1, 2001, and have been amended several times ~~to address specific issues since to address equipment reliability issues and to seek to obtain additional emission reductions to meet state and federal requirements.~~ These requirements resulted in the phasing-out of less effective existing equipment and will require the installation of equipment that meets the EVR requirements. Health and Safety Code § 41945 allows four years from the date of adoption of a more stringent standard for existing facilities to comply with the newly adopted standard. New facilities or facilities undergoing major modifications are required to meet new standards immediately after their adoption.

Figure 1-2
Balance Vapor Recovery System



Source: PAR 461 Preliminary Draft Staff Report, 2008

Figure 1-3
Vacuum Assist Vapor Recovery System



Source: PAR 461 Preliminary Draft Staff Report, 2008

EVR is being phased-in and includes the following six modules for both Phase I and Phase II vapor recovery systems:

- Module 1: Phase I vapor recovery (CP-201, Section 3.1 - 3.6)
- Module 2: Phase II Vapor Recovery (CP-201, Sections 4.1 - 8)
- Module 3: On-Board Refueling Vapor Recovery (CP-201, Section 4.4)
- Module 4: Liquid Retention and Nozzle Spitting (CP-201, Section 4.8)
- Module 5: Spillage and Dripless Nozzle (CP-201, Section 4.3 and 4.7)
- Module 6: In-Station Diagnostics (CP-201, Section 10)

A discussion of each module can be located in the Control Technology – Enhanced Vapor Recovery Appendix of this ~~Draft~~Final EA.

The EVR for Phase I (one module) included the improvements of the spill containment and covers; rotatable product and vapor adaptors; and pressure vacuum vent valve. With the four year phased-in period as provided under Health and Safety Code, the Phase I module for both the balance and the vacuum assist systems was fully implemented on April 1, 2005.

The EVR for Phase II (five modules) includes, among others, the onboard refueling vapor recovery (ORVR) compatibility, and the in-station diagnostic (ISD). The ORVR module recognizes that new vehicles equipped with the ORVR system ~~and~~ routes gasoline vapor displaced during vehicle fueling to the onboard canister on the vehicle instead of returning the vapor to the storage tank at the facility. The ISD is designed to provide continuous real-time monitoring of vapor collection and containment efficiencies; alert the GDF operator when a failure mode is detected so that corrective action can be taken; shut down the dispensers, if repairs are ignored; and provide compliance records.

GDFs with underground storage tanks will need to upgrade to EVR Phase II vapor recovery. Approximately 4,500 GDFs (3,300 retail GDFs and 1,200 non-retail GDFs) in the district and 13,000 GDFs statewide will need to obtain permits to construct and operate, install CARB certified equipment by a certified contractor, and demonstrate compliance with the EVR requirements by April 1, 2009 (the end of the four year phase-in period).

Prior to the implementation of the ORVR requirements in 2005, approximately half of the GDFs in the district were operating balance vapor recovery systems and the other half were operating vacuum assist vapor recovery systems. However, a large percentage of GDF operators in the district changed their vapor recovery from the vacuum assist to the balance system primarily due to the lower cost of ORVR compatibility. As a result, approximately 3,000 retail GDFs in the district now operate the balance vapor recovery system representing approximately 90 percent of the total retail GDFs in the district. The number of the GDFs that operate vacuum assist systems is approximately 400 facilities, which represent approximately 10 percent of the total GDFs in the district.

To date, two EVR Phase II systems are CARB certified. The Franklin Fueling System (FFS), also known as Healy, and the Vapor Systems Technology (VST) for use with the vacuum assist and the balance vapor recovery systems, respectively. Other EVR Phase II systems are being

tested and evaluated by CARB for possible certification. Both FFS and VST systems manufacturers have stated that they will be able to meet the equipment demand; however, there is a potential shortage of certified installation and certified testing contractors if the majority of GDF operators do not take appropriate steps in a timely manner to purchase, install and test their EVR systems to comply with state law and wait until the April 1, 2009 deadline approaches.

AFFECTED INDUSTRY

There are approximately 3,300 retail GDFs, 1,200 non-retail GDFs (with underground storage tanks) and 500 non-retail GDFs (with above ground storage tanks) in the district, dispensing about seven billion gallons of gasoline annually. Non-retail GDFs or consumer accounts are located in many business with motor pools, car dealership, agriculture operations, and governmental facilities. Over 95 percent of the total gasoline throughput in the district is from the retail GDFs. Currently, the EVR regulations only apply to GDFs with underground storage tanks (USTs). SCAQMD records indicate that all retail GDFs and approximately 70 percent of the non-retail GDFs are equipped with USTs.

Tables 1-1 and 1-2 lists the number and percentage of retail and non-retail GDFs and gasoline throughput by county based on the SCAQMD and CARB Emissions Inventory.

**Table 1-1
Distribution of Retail Gasoline Dispensing Facilities in the District**

County	Total Number of Retail GDFs	Percent of Total Retail GDFs	Annual Throughput (x 1,000 gallon)	Percent of Throughput
Los Angeles	2,046	62	3,990,000	60
Orange	561	17	1,263,500	19
Riverside	396	12	798,000	12
San Bernardino	297	9	598,000	9
Total	3,300	100	6,649,500	100

Table 1-2 lists the different ownership categories of the retail GDF facilities and the percentage of facilities in each category.

Based on the assumption that the distribution by county of the non-retail GDFs is similar to that of the retail GDFs, Table 1-3 presents the number and percentage of the 1,200 non-retail GDFs and gasoline throughput by county based on the SCAQMD and CARB emission inventory.

**Table 1-2
Retail GDF Ownership**

Ownership Categories	Percentage
Major oil company owned dealer operated facilities	52
Independent individual operated facilities	21
Major oil company operated facilities	18
Independent company operated facilities	9

Table 1-23
Distribution of Non-Retail Gasoline Dispensing Facilities in the District

County	Number of Non-Retail GDFs	Percent of Non-Retail GDFs	Annual Throughput (x 1,000 gallons)	Percent of Throughput
Los Angeles	744	62	300,000	60
Orange	204	17	95,000	19
Riverside	144	12	60,000	12
San Bernardino	108	9	45,000	9
Total	1,200	100	500,000	100

As previously discussed, GDFs are equipped either with the balance or the vacuum assist vapor recovery system. During the implementation of ORVR requirements, many GDFs operators have changed their vapor recovery from the vacuum assist to the balance vapor recovery system to avoid the higher cost of vacuum assist/ORVR compatibility. As a result, the majority of GDFs in the district are currently using the balance vapor recovery system. Table 1-34 illustrates the number and the percentage of GDFs that operate the balance and the vacuum assist systems in the district.

Table 1-34
Number and Percentage of GDFs with the Balance and the Vacuum Assist Systems in the District (Equipped with Underground Storage Tank)

Type of GDFs	Vapor Recovery System	
	Balance System	Vacuum Assist System
Retail	2,900	400
Non-Retail	1,200	
Total/Percentage	4,100 (91 percent)	400 (9 percent)

PROJECT DESCRIPTION

The following summarizes requirements and advisory provisions of the proposed amended rule. A copy of PAR 461 is included in Appendix A.

Applicability

No changes have been made to the applicability of the rule.

Definitions of Terms

Altered facility was changed to altered gasoline transfer and dispensing facility. A definition of E-85 fuel was added. Sections 8 and 10 of the CARB CP 201 (Certification Procedure for Vapor Recovery Systems at gasoline dispensing facilities) were replaced with Section 9 of the CARB CP 201 from the definition of enhanced vapor recovery.

Requirements

- “CARB certified” vapor recovery system was changed to “CARB certified” enhanced vapor recovery system. The enhanced vapor recovery system requirements for stationary storage tanks or mobile fueler tanks would be reorganized into separate subparagraphs for underground storage tanks, above ground storage tanks, mobile fueler tanks and gasoline delivery tank truck/trailers.
- Phase I enhanced vapor recovery systems was replaced with “CARB certified” vapor recovery systems.
- The requirement that each gasoline-dispensing nozzle be equipped with a CARB certified coaxial hose would be altered to state coaxial hose as specified in the applicable CARB Executive Order.
- Installation, alteration, repair or replacement requirements have been expanded.

The proposed amendments [subparagraphs (c)(3) (A) & (C)] require that all contractors installing, modifying or repairing any certified Phase II EVR system or components shall have successfully completed the applicable manufacturer and the International Council Code (ICC) training programs, or an equivalent state certification program required for the replacement of components. The requirement for obtaining relevant certification shall take effect six months after such certification tests become available. The proposed amendments [subparagraphs (c)(3) (C) & (D)] include ~~the same~~ similar certification requirements developed specifically for the owner/operators of GDFs or their direct employees when they install, modify or repair any defective nozzles, hoses and breakaways with new CARB certified components. Proof of the contractor certification shall be submitted to the owner/operator of the GDFs prior to operations.

- The set point for the pressure-vacuum relief valve for a underground storage tank vent has been altered from three inches of water column to a range of 2.5 to 6.0 inches of water column for pressure relief and from eight plus or minus two inches of water column to a range of 6.0 to 10.0 inches of water column.
- The EVR Phase II regulations have been delayed for dispensing of E-85 into a mobile fueler or a vehicle fuel tank until April 1, 2012.
- The EVR Phase II regulations for owners/operators of non-retail gasoline dispensing facilities become effective April 1, 2012. In lieu of complying with EVR Phase II regulations from April 1, 2009 to April 1, 2012, owners/operators of non-retail gasoline dispensing facilities would need to:
 - Use nozzles that are a part of a “CARB certified” vapor recovery system, except the vapor return line would be sealed off;
 - Install and maintain pressure monitoring devices to record pressure within the underground fuel storage tank at a minimum of every fifteen minutes. For multiple facilities ownership, pressure monitors shall be installed on at least 50 percent of the storage tank under the common ownership. Recordkeeping requirements are included.

- Submit an application for a permit to operate the gasoline dispensing equipment and agree to comply with the following permit conditions:
 - No fuel shall be dispensed into vehicle that is not owned or under direct control of the operator, except for vehicle used in emergency response;
 - No fuel shall be dispensed into vehicle not equipped with onboard refueling vapor recovery (ORVR) systems, except for vehicle used in emergency response;
 - Maintain records of the date and quantity of fuel dispensed by vehicle, and the make, model, model year, and vehicle identification number of all vehicle(s) refueled at the facility. Such records shall be maintained at the facility for at least five years and shall be made available to the Executive Officer upon request.

- Self-Compliance Program Requirements were expanded to include:
 - Maintenance schedules consistent with applicable Phase I and Phase II requirements,
 - A procedure to determine and record the next required test date, and
 - An employee training program.

- Compliance Plan for CARB Implementation of Phase II EVR system
The owner/operator of any existing GDF who fails to complete and demonstrate compliance with Phase II EVR requirements on or before October 1, 2008, is required to submit a compliance plan and associated fees by October 1, 2008. The objectives of the compliance plan are to outline the increments of progress of Phase II EVR implementation and assure compliance with the CARB deadline of April 1, 2009. The compliance plan shall specify/include, at minimum, the following requirements for the owners/operators of the GDFs:
 - I. Permit Applications
Submit complete packages of the required applications for permit to install and operate CARB certified Phase II EVR systems. The required applications include SCAQMD applications forms including 400-A, 400-E-11 and 400-CEQA, and other applicable applications required to obtain permits from the local city/county planning and building divisions, the fire department or the Certified Unified Program Agencies (CUPA). The required applications shall be submitted at least two months prior to the equipment installation.
 - II. Place Purchase Order
Place purchase orders of CARB certified Phase II EVR within seven days of receiving SCAQMD permits.
 - III. Installation Contract
Sign installation contracts with certified contractors at least one month prior to the equipment installation date. The installation agreement shall specify the schedule for construction and installation of certified Phase II EVR equipment, the contractor meets all qualifications for installation of the equipment, and a completion date of no later than April 1, 2009.
 - IV. Testing Contract
Sign testing contracts for Phase II EVR systems to verify compliance with the applicable executive order requirements at least one month prior to the equipment

installation. The testing contract shall specify that the tester meets all qualifications for conducting the tests.

V. Equipment Installation

Install the Phase II EVR systems no later than March 1, 2009.

VI. Equipment Testing

The objective of testing of Phase II EVR system is to verify compliance with the applicable CARB Executive Orders requirements. The testing shall be completed no later than Mach 21, 2009.

VII. Declaration

Declare that owner/operator understands that a GDF will not be allowed to dispense gasoline into vehicles without a certified Phase II EVR system on and after April 1, 2009. The declaration dose not preclude the owner/operators right to seek administrative relief under Regulation V – Procedure Before the Hearing Board.

The Executive Officer or his designee shall not approve the compliance plan unless the plan shows that the installation and testing of compliant CARB certified Phase II EVR equipment can be reasonably be expected on or before April 1, 2009.

The owners/operators of GDFs are required to maintain all records to demonstrate compliance with the approved compliance plan. Failure to comply with dates set forth in an approval compliance plan constitutes a violation of this rule.

A owner/operator of a gasoline transfer and dispensing facility that will permanently cease the dispensing of gasoline before April 1, 2009, would be required to submit to the Executive Officer a compliance plan on or before October 1, 2008, with a declaration to irrevocably surrender their permit to operate to the Executive Officer before April 1, 2009, and a declaration acknowledging that it shall be in violation of this rule for each and every day the gasoline transfer and dispensing facility operators continue operating on or after April 1, 2009. SCAQMD would waive all required fees pursuant to Rule 306 – Plan Fees for a gasoline transfer and dispensing facility submitting to a compliance plan to permanently cease the dispensing of gasoline before April 1, 2009.

In lieu of the compliance plan requirements, the owner/operator of an existing gasoline transfer and dispensing facility may submit to SCAQMD required application(s) for a permit to construct and operate, on or before September 1, 2008, that outlines the increments of progress towards completing the installation of CARB certified Phase II enhanced vapor recovery equipment by April 1, 2009. The application would incorporate dates that are no later than the following applicable dates:

Application Date

For all applicable regulatory agencies other than the SCAQMD, at least two months prior to installation date

Equipment Order Date

Within seven days of receiving all applicable permits

Installation Contract Date

At least one month prior to installation date

<u>Testing Contract Date</u>	<u>At least one month prior to installation date</u>
<u>Start Date for Equipment Installation</u>	<u>No later than March 1, 2009</u>
<u>Start Date for Equipment Testing</u>	<u>No later than March 21, 2009</u>

The Executive Officer would not approve the application for a permit to construct and operate unless the application demonstrates that the installation and testing of a compliant CARB certified Phase II enhanced vapor recovery system can be reasonably expected on or before April 1, 2009, and the owner/operator submits a signed declaration that states that he/she understands that the gasoline transfer and dispensing facility will not be allowed to dispense gasoline without a CARB certified Phase II enhanced vapor recovery system on or after April 1, 2009. If the Executive Officer denies an application for a permit to construct and operate, the owner/operator of a gasoline transfer and dispensing facility would be required, within 30 days, to submit to the Executive Officer a revised application for a permit to construct and operate addressing all deficiencies identified by the Executive Officer. If the application filing date is after October 1, 2008, the owner/operator shall also comply with the compliance plan requirements of the proposed amended rule.

- **Performance Test**
Currently, paragraph (e)(1) requires the owner/operator of a new or altered GDF to conduct and successfully pass the performance tests required by the applicable CARB Executive Order and SCAQMD permits within thirty (30) calendar days after the initial operation. Staff field observations revealed that in many cases owners/operators of new or altered GDFs conduct the applicable performance tests immediately after the installation/alteration. However, it would be beneficial to air quality to test and verify the new/altered vapor recovery system prior to operation to assure the integrity of the vapor recovery system and compliance with the applicable requirements.
- **Reverification Test Schedules**
The proposed amendments provide a flexible reverification tests schedule set on the month (not days) of the performance testing. Operations of affected GDFs shall conduct the reverification tests after six or 12 months of the performance test based on their maximum monthly throughput. If a performance test or reverification test cannot be conducted at the scheduled date and time, the test may be re-scheduled to a later date and time provided that SCAQMD is notified at least 24 hours prior to the originally scheduled time by electronic mail or other SCAQMD approved methods. Failure to conduct the reverification test on the preset schedule will represent a violation of this rule but will not alter or change the schedule.
- The proposed amendment [subparagraphs (e)(3) and paragraphs (F), (G), (H) & (I)] establishes accountability/requirements for performance and reverification testers as follows:
 - I. Successful completion of the SCAQMD Orientation Class and the ICC tester certification or equivalent state certification during the previous 24 months;
 - II. Within any six months, if a tester receives two notices of violation for failure to conduct performance or reverification tests in accordance with CARB's applicable testing procedure as specified in subparagraph (e)(3) (A), he/she shall cease

- conducting performance and reverification tests after receiving the second notice of violation and prior to successfully re-completing the SCAQMD's Testers Orientation Class.
- III. Within any 12 months, the tester shall not receive more than three notices of violation for failure to conduct performance or reverification tests in accordance with CARB applicable testing procedures as specified in subparagraph (e)(3)(A).
- Compliance dates that have passed would be removed.

Exemptions

The storage tank or mobile fueler exemption for fueling implements of husbandry would be removed.

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Draft <u>Final</u> Environmental Assessment (EA) for Proposed Amended Rule (PAR) 461- Gasoline Transfer and Dispensing
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Mr. James Koizumi (909) 396-3234
PAR 461 Contact Person	Dr. Helmy Sultan (909) 396-2362
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	The objective of PAR 461 is to assure the timely implementation of California Air Resources Board (CARB) Phase II Enhanced Vapor Recovery (EVR) regulation in all gasoline dispensing facilities (GDFs) in the district on or before CARB's deadline, April 1, 2009. PAR 461 also enhances rule clarity and enforceability in several areas including contractor certification, approved tester accountability, and compliance testing.
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/
Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Solid/Hazardous Waste | <input type="checkbox"/> Transportation/
Traffic | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: January 18, 2008

Signature: Steve Smith

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As discussed in Chapter 1, the main focus of the proposed amended rule is to codify CARB's EVR regulation into Rule 461 and ensure Phase II enhanced vapor recovery and monitoring equipment is installed at gasoline transfer and dispensing facilities on or before the April 1, 2009 CARB deadline. The Phase II enhanced vapor recovery and monitoring equipment requirements became state law on April 1, 2001. The state requirements will occur by April 1, 2009, whether PAR 461 is adopted or not.

PAR 461 includes requirements to encourage early implementation (compliance plan and fees), address complaints of vapor recovery testers concerning reverification test schedules and approve the accountability of testers, installers and repairers of vapor recovery systems. The exemption of early implementation, proposed SCAQMD requirements would have little environmental impact. The environmental affects of early implementation are evaluated in the environmental checklist below.

New Construction or Operations

PAR 461 would require Phase II EVR at new facilities. Since the installation of Phase II EVR is similar to the installation of existing Phase II vapor recovery equipment required by the current Rule 461, there would be no additional adverse impacts at new facilities.

Existing Facilities

Construction at existing facilities would require heavy-duty truck trips and may require construction equipment (forklifts, trenching equipment, loaders, haul trucks, cement trucks). Based on discussions with contractors, SCAQMD staff does not expect more than 75 feet of trenching at any one facility. Construction is not expected to last more than a week. Enhanced vapor recovery and monitoring systems are general not visible or not expected to appear much different than existing gasoline transfer and dispensing equipment.

Modifications to PAR 461 After Circulation of the Draft EA for Public Review and Comment

PAR 461 has been modified subsequent to the circulation of the Draft EA for public review and comment. Four primary changes have been made and are summarized as follows:

- A new requirement to delay implementation of Phase II vapor recovery requirements for E-85 fuel until April 1, 2012 has been added.
- Implementation of Phase II EVR for non-retail gasoline dispensing facilities (GDFs) into fleets that are equipped with on-board refueling vapor recovery (ORVR) vehicles or emergency vehicles has been delayed from April 1, 2009 to April 1, 2012.
- An alternative to the compliance plan has been added to PAR 461 that would allow existing facility owners/operators to submit permits to construct and operate by September 1, 2008, for installation of CARB Phase II EVR equipment by April 1, 2009 instead of submitting a compliance plan. The compliance plan alternative requires the application to include application dates for other applicable regulatory agencies, equipment order, installation contract, equipment installation and equipment testing. A signed declaration that the owner/operator of the gasoline transfer and dispensing facility understands that the facility

would not be allowed to dispense gasoline with a CARB certified Phase II EVR system on or after April 1, 2009.

- A compliance plan option has been added for facilities that would permanently cease the dispensing of gasoline before April 1, 2009. The compliance plan includes a declaration acknowledging violation for each and every day the gasoline transfer and dispensing facility operators continue operating on or after April 1, 2009.

The first two items added to PAR 461 were requested by EPA and CARB⁴ and certain non-retail GDF operators. CARB and EPA have asked SCAQMD to exempt E-85 fuel and non-retail GDFs that dispense gasoline into fleet that are equipped with ORVR vehicles or emergency vehicles. There are currently no CARB certified systems that would meet the Phase II vapor recovery requirements for E-85. Since these two options are considered part of CARB's Phase II EVR requirements, they do not change the proposed project's objectives. PAR 461 is more stringent because it does not provide a full exemption for these two categories, but provides sunset dates that will allow SCAQMD staff to evaluate whether the two exemptions are needed. The delayed dates would not only reduce the amount of VOC reductions expected by CARB, but would also delay potential construction emissions from these facilities until April 1, 2012. The delayed dates in PAR 461 for GDFs fueling vehicles with ORVR are also more conservative than the EPA/CARB exemption, because they include requirements for "CARB certified" vapor recovery system nozzles and pressure monitoring devices that are not required by the EPA/CARB exemption.

The number of E-85 facilities is expected to be low; and since only 15 percent of E-85 fuel consist of gasoline, the VOC reductions from gasoline at E-85 facilities would be small. There are 1,200 non-retail facilities, but not all would qualify for the non-retail GDFs that dispense gasoline into fleets that are equipped with ORVR.

SCAQMD staff did not take additional credit for VOC reductions under PAR 461, so there would be no adverse VOC reduction impacts. While the delayed dates may affect the overall number of facilities that may require construction and could affect daily construction; the adverse construction impact estimates in the EA are conservative and the modifications would only reduce the number of facilities that may potentially require construction activities. Since, the modifications would only reduce adverse impacts from construction; emissions in the EA are more conservative. Therefore, these changes would not affect overall conclusions in the Draft EIR.

The last two modifications would be modifications or alternatives to the compliance plan requirements. Since the modifications would still include milestone dates to ensure compliance with CARB Phase II EVR requirements, there would be no adverse impacts to any environmental area.

⁴ Letter from Ms. Sally Rump of ARB to Dr. Helmy Sultan dated February 20, 2008. The letter includes a comment on PAR 461 requesting that SCAQMD staff consider including Phase II exemptions for E85 fueling and for facilities that fuel primary vehicles equipped with ORVR.

Undated letter from Mr. James N. Goldstene of ARB to local air pollution control officers (APCOs) requesting that local districts revise vapor recovery rules to eliminate the requirement for Phase II recovery systems on gasoline refueling dispensers for motor vehicle fleets with ORVR as outlined by EPA.

Modifications to PAR 461 have been reviewed and staff has concluded that none of the modifications alter any conclusions reached in the Draft EA, nor provide new information of substantial importance relative to the Draft EA. As a result, these minor revisions do not require recirculation of the document pursuant to CEQA Guidelines §15073.5.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

I.a), b), c) & d) PAR 461 would affect existing facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require additional piping or electrical conduit. Construction would require heavy-duty truck trips and may require construction equipment (forklifts, trenching equipment, loaders, haul trucks, cement trucks). Based on discussions with contractors, SCAQMD staff does not expect more than 75 feet of trenching at any one facility. Construction is not expected to last more than a week. Enhanced vapor recovery and monitoring systems are general not visible or are not expected to appear much different than existing gasoline transfer and dispensing equipment. Therefore, compliance with PAR 461 required during related operation is not expected to change to the visual character of the existing setting at affected facilities.

Additional light or glare would not be created which would adversely affect day or nighttime views in the area since no light generating equipment would be required to comply with proposed amended rule.

Based upon these considerations, significant adverse aesthetics impacts are not anticipated and will not be further analyzed in this ~~Draft~~Final EA. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES. Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on agricultural resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses.

II.a), b), & c) PAR 461 would affect existing facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may

require additional piping or electrical conduit. However, all construction and operational activities are expected to occur at facilities with gasoline transfer and dispensing operations, which are typically located in commercial or industrial areas. PAR 261 is not expected to generate any new development. The exemption for storage tanks and mobile refuelers used for the fueling of implements of husbandry would be eliminated under PAR 461. Although these affected equipment may be located in agricultural areas, these are also existing facilities and, as such, would not affect existing agriculture. Therefore, PAR 461 is not expected to convert any classification of farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract.

Based upon these considerations, significant agricultural resource impacts are not anticipated and will not be further analyzed in this ~~Draft~~Final EA. Since no significant agriculture resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
III. AIR QUALITY. Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

III. a) PAR 461 codifies existing CARB Phase II EVR regulations, which become effective would April 1, 2009. Since PAR 461 would assist in implementing state regulations, which

would reduce VOC emissions, PAR 461 would not conflict with or obstruct implementation of the applicable air quality plan.

III. b), c), d), and f) For a discussion of these items, refer to the following analysis.

Air Quality Significance Criteria

Attainment of the state and federal ambient air quality standards protects sensitive receptors and the public in general from the adverse effects of criteria pollutants which are known to have adverse human health effects. To determine whether or not air quality impacts from adopting and implementing the proposed amendments are significant, impacts will be evaluated and compared to the criteria in Table 2-1. The project will be considered to have significant adverse air quality impacts if any of the thresholds in Table 2-1 are equaled or exceeded.

**Table 2-1
Air Quality Significance Thresholds**

Mass Daily Thresholds		
Pollutant	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk \geq 10 in 1 million Hazard Index \geq 1.0 (project increment) Hazard Index \geq 3.0 (facility-wide)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants ^a		
NO2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
PM10 24-hour average annual geometric average annual arithmetic mean	10.4 $\mu\text{g}/\text{m}^3$ (recommended for construction) ^b & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$ 20 $\mu\text{g}/\text{m}^3$	
Sulfate 24-hour average	1 $\mu\text{g}/\text{m}^3$	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

^a Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^b Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq greater than or equal to

Air Quality Impacts

Construction

PAR 461 would not require installation of additional equipment and associated activities construction not already required by CARB Phase II EVR. Construction emissions were not evaluated by CARB, but are estimated here for completeness. PAR 461 would only require minor construction: installation of enhanced vapor recovery and monitoring equipment and possible trenching for piping and conduit. Construction would require heavy-duty truck trips and may require construction equipment (forklifts, trenching equipment, loaders, haul trucks, cement trucks). Based on discussions with contractors, SCAQMD staff does not expect more than 75 feet of trenching at a facility. Construction is not expected to last more than a week. Most of the emissions would occur during the trenching and paving construction phases. The installation of equipment is not expected to require heavy-duty construction equipment. Construction phases at a single facility are not expected to overlap.

Table 2-2 presents the distribution of gasoline dispensing facilities. There are approximately 4,500 gasoline dispensing facilities in the Basin. Approximately 1,000 permit applications have been submitted to SCAQMD at the time of the release of the Draft EA. SCAQMD staff assumes that approximately 60 percent of the facilities that have not submitted permit applications would complete certification completed before October 1, 2008. The remaining 1,400 facility operators would be required to submit at compliance plan and complete certification by April 1, 2009.

Table 2-2
Distribution of Gasoline Dispensing Facilities

Description	Existing Gasoline Dispensing Facilities	Permit Applications Already Received	Early Certification by October 1, 2008 Under PAR 461 ^a	Facilities Certified by April 1, 2009
Total Number of Facilities	4,500	1,000	2,100	1,400
Facilities that Need Construction ^b	1,800	400	840	560
Facilities with Installation Only ^c	2,700	600	1,260	840
Facilities that Need Construction, Daily ^d			4	2
Facilities with Installation Only, Daily ^d			6	2

a) Assumed 60 percent of remaining applications would comply with EVR regulations by October 1, 2008.

b) Construction in this table refers to trenching and paving in addition to installation of Phase II EVR equipment. It is assumed based on the permit applications already submitted that 40 percent of the facilities would need trenching and paving in addition to installation of Phase II EVR equipment.

c) Other facility operators would only need to install Phase II EVR equipment (i.e., would not need trenching and paving).

d) Assumed early certification would occur between April and October (214 days).

Based on information from the existing 1,000 permit applications, SCAQMD staff assumes that approximately 40 percent of the applicants would need to trench and pave to install Phase II EVR systems. The other 60 percent would only need to install Phase II EVR components.

Facilities that certify Phase II EVR before October 1, 2008 are expected to result in trenching and paving at four facilities per day to install Phase II EVR systems and only installing of Phase II EVR at six facilities per day. Construction criteria pollutant emissions from these ten facilities per day are presented in Table 2-3. The construction criteria pollutant emissions from ten facilities per day are below CEQA criteria pollutant emissions thresholds. Therefore, construction emissions from facilities that certify Phase II EVR systems early under PAR 461 would not be significant.

For the remaining facility operators that would certify Phase II EVR systems between October 1, 2008, and April 1, 2009, construction would involve trenching and paving to install Phase II EVR systems at two facilities, and installation of Phase II EVR without trenching and paving at two facilities per day. Therefore based on the number of facilities that need construction, criteria emissions from the facilities that are not certified by October 1, 2008, would be less than those that certify early.

Therefore, construction emissions from PAR 461 would not be significant. Detailed construction emission calculations can be found in Appendix B.

**Table 2-3
Construction Criteria Emissions**

Description	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOx, lb/day
Maximum Emissions*	44.4	89.4	5.5	5.2	12.5	0.1
Significance Threshold	550	100	150	55	75	150
Significant?	No	No	No	No	No	No

* Assumes four facilities per day would need trenching or paving and six facilities would need installation on a maximum day.

Health Risk

Health risk from construction is typically associated with diesel exhaust particulate emissions for trucks and construction equipment. Carcinogenic and chronic health values have been established by OEHHA for diesel exhaust particulate emissions. Since carcinogenic and chronic health risk are localized and the result of long-term exposure, the affect of a week of construction is not known, but would be assumed to be less than significant for minor construction because carcinogenic health risk analyzed by the SCAQMD is based on a 70-year exposure duration (sensitive receptors) or a 40-year exposure duration (workers).

Global Warming

Combustion processes generate greenhouse gas (GHG) emissions in addition to criteria pollutants. The following analysis focuses on directly emitted CO2 because this is the primary GHG pollutant emitted during the combustion process and is the GHG pollutant for which emission factors are most readily available. CO2 emissions were estimated using emission factors from CARB’s EMFAC2007 and Offroad2007 models and EPA’s AP-42.

The analysis of GHGs is a much different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants significance thresholds are based on daily emissions

because attainment or non-attainment is based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health, e.g., one-hour, eight-hour, etc. Since the half-life of CO₂ is approximately 100 years, for example, the effects of GHGs are longer-term, affecting global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate GHG effects over a longer timeframe than a single day. Although GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects, this ~~Draft~~Final EA for PAR 461 analyzed the GHG emissions as project specific impacts.

Potential GHG emission impacts are the direct result of CARB adopting the EVR regulations. Review of CARB documentation for the EVR regulation indicates that no GHG analysis was prepared. Therefore, this analysis of GHS emission focuses primarily on GHG emissions resulting from CARB's adoption of the EVR regulation.

The analysis estimated CO₂ emissions from construction sources from the beginning of CARB's Phase II EVR regulations until the final compliance date of April 1, 2009, when all necessary Phase II EVR systems must be installed. There would be no CO₂ emissions from operation of the enhanced vapor recovery and monitoring systems, because these systems do not require combustion for any reason.

Overall CO₂ emissions are presented in Table 2-4. CARB's Phase II EVR regulation would result in 2,291 metric tons of CO₂. All CO₂ emissions from CARB's Phase II EVR regulation are solely from construction, which is a one time event. Further, the overall project emissions are a result of CARB rule making not PAR 461. The purpose of PAR 461 is to codify CARB's Phase II EVR regulations, which would go into effect regardless of adopting PAR 461. In addition to codifying CARB's Phase II EVR regulation, PAR 461 includes components to encourage early implementation of CARB's Phase II EVR regulation. As a result, the components that encourage PAR 461 would shift when the GHG emissions would occur in time. Therefore, PAR 461 does not generate more GHG emissions that already anticipated for CARB's EVR regulation and, as a result, is concluded to be less than significant relative to GHG emission impacts.

**Table 2-4
Global Warming Emissions**

Description	CO ₂ , lb/facility	CO ₂ ton/project	CO ₂ , metric ton/project
Trenching	1,014	913	828
Installation	676	913	828
Paving	778	700	635
Total	2,468	2,525	2,291

Includes all EVR facilities including those that are already completed.
Assumes one day of trenching and one day of paving at 1,400 facilities and three days of installation at 3,500 facilities.

Operations

PAR 461 would not generate any new operational emissions. Enhanced vapor recovery and monitoring from CARB requirements would reduce VOC emissions.

Since criteria pollutant emissions, health risk and global warming emissions from PAR 461 are less than significant, PAR 461 is not expected to violate any air quality standard, contribute to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations, or diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollution. Since project specific criteria pollutant emissions are not significant, cumulative criteria pollutant emissions are not expected to be significant.

III.e) Historically, the SCAQMD has enforced odor nuisance complaints through SCAQMD Rule 402 - Nuisance. Affected facilities are not expected to create objectionable odors affecting a substantial number of people for the following reasons: 1) construction is expected to be minor; 2) enhanced vapor recovery and monitoring would reduce operating VOC emissions and any potentially associated odors; and 3) the operations occur at affected facilities that are typically located in commercial or industrial zones.

Conclusion

Based on the preceding discussion, PAR 461 codifies CARB's Phase II EVR regulation to reduce VOC emissions, which is an air quality benefit. Further, PAR 461 includes components to encourage early compliance, which, if implemented by owners/operators of affected facilities, would produce air quality benefits sooner.

The proposal has no provision that would cause a violation of any air quality standard or directly contribute to an existing or projected air quality violation. Lowering VOC emissions would assist in reducing overall PM and ozone concentration throughout the district.

Since VOC air quality impacts from implementing PAR 461 are seen as benefits and PAR 461 would not cause an exceedance of any of the air quality significance thresholds in Table 2-1, air quality impacts are not considered to be cumulatively considerable as defined in CEQA Guidelines §15065(c). Therefore, the proposed project is not expected to result in significant adverse cumulative impacts for any criteria pollutant.

Thus, PAR 461 is not expected to result in significant adverse air quality impacts and mitigation measures are not required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

IV.a), b), c), & d) CARB's EVR regulation, which is being codified into PAR 461 would only affect facilities with gasoline transfer and dispensing operations. PAR 461 does not require siting or construction of new gasoline transfer and dispensing operations. Facilities with gasoline transfer and dispensing operations have been previously disturbed for the installation of storage tanks, dispensing operations, etc. In addition, most facilities have been disturbed recently to replaced single walled storage tanks with double walled tanks to comply with the California Underground Storage Tank Law and Regulations (CCR, Title 23, Division 3, Chapter 16, Underground Tank Regulations).

Facility operators affected by CARB's EVR regulation, which is being codified into PAR 461, would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require installation of additional piping or electrical conduit. However, all construction and operational activities are expected to occur at existing facilities with gasoline transfer and dispensing operations. The component of PAR 461 that encourages early implementation does not create additional construction activities, it simply shifts when they would occur. PAR 461 is not expected to generate any new development. As a result, PAR 461 would not directly or indirectly affect any species identified as a candidate, sensitive or special status species, riparian habitat, federally protected wetlands, or migratory corridors. For the same reasons PAR 461 is not expected to adversely affect special status plants, animals, or natural communities.

IV.e) & f) PAR 461 would not conflict with local policies or ordinances protecting biological resources nor local, regional, or state conservation plans because it would only affect gasoline transfer and dispensing operations. Additionally, PAR 461 will not conflict with any adopted local policies, ordinances protecting biological resources, Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan for the same reason.

The SCAQMD, as the Lead Agency for the proposed project, has found that, when considering the record as a whole, there is no evidence that the proposed project would have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends. Accordingly, based upon the preceding information, the SCAQMD has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in §753.5 (d), Title 14 of the California Code of Regulations.

Based upon these considerations, significant adverse biological resources impacts are not anticipated and will not be further analyzed in this ~~Draft~~Final EA. Since no significant adverse biological resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside a formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

V. a), b), c), & d) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require installation of additional piping or electrical conduit. However, all construction and operational activities are expected to occur at facilities with gasoline transfer and dispensing operations. PAR 461 is not expected to generate any new development. As a result, no impacts to historical resources are anticipated to occur as a result of implementing the proposed project. PAR 461 is expected to require minor physical changes to the environment at existing affected facilities and, as a result, is not expected to disturb historical, paleontological or archaeological resources. Since PAR 461 would not require

limited construction (trenching for pipe and conduit) and physical modifications (addition of monitoring equipment and enhanced vapor recovery) existing operations at existing previously disturbed facilities, it is not expected to disturb any human remains. The component of PAR 461 that encourages early compliance does not create additional construction activities; it simply shifts when they would occur.

Based upon these considerations, significant adverse cultural resources impacts are not expected from the implementing PAR 461 and will not be further assessed in this ~~Draft~~Final EA. Since no significant cultural resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

VI.a), b), c), d) & e) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require additional piping or electrical conduit. However, all construction and operational activities are expected to occur at facilities with gasoline transfer and dispensing operations. PAR 461 is not expected to generate any new development. PAR 461 would require additional diesel fuel for construction equipment and delivery and haul trucks. Construction is expected to be limited to minor trenching and the installation of vapor recovery and monitoring equipment. Minor diesel use and electrical demand for monitoring equipment are not expected to conflict with adopted energy conservation plans or standards; substantially deplete existing energy resource supplies; increase demand for utilities; which would adversely impact the current capacities of the electric and natural gas utilities or use non-renewable resources in a wasteful and/or inefficient manner. Operators affected by PAR 461 are expected to continue to comply with all existing energy standards. The component of PAR 461 that encourages early compliance does not create additional construction activities; it simply shifts when they would occur.

Therefore, PAR 461 is not expected to generate significant adverse energy resources impacts and will not be discussed further in this ~~Draft~~Final EA. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

VII.a) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with existing gasoline transfer and dispensing operations that are typically paved. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring systems to comply with PAR 461 may require installing additional piping or electrical conduit. Construction may require about 75 feet of trenching at the largest existing affected facility. Trenching is expected to occur at facilities that have already been disturbed and paved. The areas disturbed are expected to be repaved.

Southern California is an area of known seismic activity. Structures must be designed to comply with the Uniform Building Code Zone 4 requirements if they are located in a seismically active

area. The local city or county is responsible for assuring that a proposed project complies with the Uniform Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the Code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some non-structural damage; and (3) resist major earthquakes without collapse but with some structural and non-structural damage.

The Uniform Building Code bases seismic design on minimum lateral seismic forces (“ground shaking”). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site.

Accordingly, buildings and equipment at existing affected facilities are required to conform to the Uniform Building Code and all other applicable state and local building codes in effect at the time they were constructed.

All construction and operational activities are expected to occur at facilities with gasoline transfer and dispensing operations. PAR 461 is not expected to generate any new development. As a result, substantial exposure of people or structure to the risk of loss, injury, or death involving seismic-related activities is not anticipated as a result of PAR 461 and will not be further analyzed in this ~~Draft~~Final EA.

VII.b), c), d) & e) PAR 461 would require minor trenching for piping and conduit (approximately 75 feet). Affected PAR 461 facilities have already been disturbed to install storage tanks and dispensing equipment and then repaved. The areas trenched in connection with complying with PAR 461 would be compacted and re-paved. All trenching operations are expected to follow state and local construction codes, including SCAQMD Rule 403 – Fugitive Dust, which would substantially reduce the potential for soil erosion. Since only minor trenching would be completed according to state and local construction codes, PAR 461 is not expected to significantly impact soils; locate new facilities on unstable geologic units or soils that could result in landside, subsidence, liquefaction, etc.; locate new facilities on expansive soils as defined in Table 18-1-B of the UBC; etc. PAR 461 would not alter or require installing septic tanks. Finally, the component of PAR 461 that encourages early compliance does not create additional construction activities; it simply shifts when they would occur.

Based on the above discussion, the proposed project is not expected to generate significant adverse geology or soils impacts. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the ~~draft~~Final EA. No mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

VIII.a, b) c) & i) PAR 461, which codifies CARB’s Phase II EVR regulations, would involve modification or construction around gasoline transfer and dispensing equipment at existing facilities. Since any construction that could affect existing gasoline transfer and dispensing operations may compromise the storage or dispensing system, proper safety precautions must be taken. The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make construction and annual business inspections to ensure compliance with permit conditions and other appropriate regulations.

Further, all hazardous materials are expected to be used in compliance with established OSHA or Cal/OSHA regulations and procedures, including providing adequate ventilation, using recommended personal protective equipment and clothing, posting appropriate signs and warnings, and providing adequate worker health and safety training. When taken together, the above regulations provide comprehensive measures to reduce hazards of explosive or otherwise hazardous materials. Compliance with these and other federal, state and local regulations and proper operation and maintenance of equipment should ensure the potential for explosions or accidental releases of hazardous materials is not significant.

During operations, PAR 461 would reduce exposure to gasoline vapor, since the vapor recovery system would reduce the amount of gasoline vapors emitted. The monitoring system would alert operators to leaks or damage to the gasoline delivery system. The reduction in gasoline vapors emitted and monitoring system would reduce exposure to gasoline and gasoline vapors off-site receptors.

Since PAR 461 would involve trenching at facilities that involve gasoline transfer and dispensing operations there is potential for construction operations to unearth contaminated soil. The probability of encountering contaminated soil is small since many facility operators have disturbed their sites and remediated any soil contamination to comply with double containment requirements for gasoline storage tanks to comply with the California Underground Storage Tank Law and Regulations (CCR, Title 23, Division 3, Chapter 16, Underground Tank Regulations). If contaminated soil is discovered during construction activities, it is required to be handled per applicable requirements, including Title 22, California Code of Regulations (CCR), Chapter 12 and SCAQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. The component of PAR 461 that encourages early compliance does not create additional construction activities; it simply shifts when they would occur.

Based on the preceding information, it is also expected that implementing PAR 461 is not expected to increase or create any new hazardous emissions which would adversely affect existing/proposed schools, because the net effect of the proposed project would be to reduce VOC emissions, some of which may be toxic, at affected facilities.

VIII.d) Government Code §65962.5 typically refers to a list of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits. Although some sites regulated by PAR 461 may be on such a list, most affected sites are not expected to be on this list, and would not typically generate large quantities of hazardous waste. For any facilities affected by the proposed amended rule that are on the Government Code §65962.5 list, it is anticipated that they would continue to manage any and all hazardous materials and hazardous waste, in accordance with federal, state and local regulations

VIII.e), & f) PAR 461 is expected to reduce exposure to gasoline or gasoline vapors through the installation of enhanced vapor recovery and monitoring equipment. Therefore, PAR 461 is not expected to increase or create any new hazardous emissions which could adversely affect public/private airports located in close proximity to the affected sites. Accordingly, these impact issues are not further evaluated in this ~~Draft~~Final EA.

VIII.g) PAR 461 may require moving piping or installing new electrical conduit. Any existing emergency response plans and/or emergency evacuation plans at affected facilities may need to be updated to reflect changes to the gasoline transfer and dispensing system. However, the proposed project is not expected to substantially alter emergency response plans and/or emergency evacuation plans, because it would not require storage of additional quantities of gasoline or new hazardous compounds.

In the event that an existing emergency response/evacuation plan needs to be modified, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the

emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

1. Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
2. Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
3. Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
4. Procedures to notify the necessary persons who can respond to an emergency within the facility;
5. Details of evacuation plans and procedures;
6. Descriptions of the emergency equipment available in the facility;
7. Identification of local emergency medical assistance; and
8. Training (initial and refresher) programs for employees in:
 - a. The safe handling of hazardous materials used by the business;
 - b. Methods of working with the local public emergency response agencies;
 - c. The use of emergency response resources under control of the handler; and
 - d. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. Based on the preceding information, it is not anticipated that PAR 461 would impair implementation of or physically interfere with an adopted or require modifying emergency response plans or emergency evacuation plans.

VIII.h) PAR 461 would affect existing industrial or commercial facilities that include gasoline transfer and dispensing operations, which are not typically located in or adjacent to wildland areas. Because of the flammability of gasoline, such facilities are cleared of vegetation to minimize fire risks. PAR 461 would reduce gasoline vapor emissions and alert facility operators to leaks. Therefore, PAR 461 would assist in preventing risk of loss or injury associated with fires, including wildland fires if they are located near wildland areas.

In conclusion, potentially significant adverse hazard impacts resulting from adopting and implementing PAR 461 are not expected and will not be considered further.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
g) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
m) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
n) Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.
- The project increases demand for water by more than five million gallons per day.

Discussion

IX.a), c), d), e), j), k), l) & m) PAR 461, which codifies CARB's Phase II EVR regulations, would only affect existing facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require additional piping or electrical conduit. Construction at the largest affected facility may require about 75 feet of trenching. Trenching is expected to occur at facilities that have already been disturbed and paved. The areas disturbed as a result of complying with PAR 461 are expected to be re-paved.

PAR 461 would not require any water for operations nor generate any wastewater, because vapor recovery and monitoring equipment do not use water for any reason. PAR 461 may require water for dust control during construction. However, since construction is expected to be limited to piping, conduit and trenching of about 75 feet at any facility. The amount of water used is expected to be minimal. Therefore, sufficient water supplies is expected to be available and PAR 461 would not cause the construction of additional water resource facilities, the need for new or expanded water entitlements, or an alteration of drainage patterns. The component of PAR 461 that encourages early compliance does not create additional construction activities; it simply shifts when they would occur.

PAR 461 would not require any new development or construction and, therefore, would not create or contribute to runoff water. Affected PAR 461 operations typically paved for fire safety reasons or to facilitate ingress and egress of on-road vehicles. Therefore, PAR 461 would not create or contribute new sources of runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional new sources of polluted runoff.

As detailed above, the proposed amended rule is not expected to require additional wastewater disposal capacity, violate any water quality standard or wastewater discharge requirements, or otherwise substantially degrade water quality. As result, no changes to storm water runoff,

drainage patterns, groundwater characteristics, or flow are expected. Therefore, potential adverse impacts to drainage patterns, etc., are not expected as a result of implementing PAR 461

IX.b), & n) Because PAR 461 does not increase demand for water in any way, it is not expected to substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. PAR 461 would not increase demand for water from existing entitlements and resources, and will not require new or expanded entitlements because compliant devices do not use water for any reason. Since PAR 461 does not increase demand for water or increase or increase the amount of wastewater generated at affected facilities, operators of affected facilities do not need a determination by a wastewater treatment provider that sufficient capacity exists to serve the facility. Therefore, no water demand impacts are expected as the result of implementing the proposed amendments.

IX.f), g), h) & i) PAR 461 would not require any new development or construction; therefore, PAR 461 is not expected to generate construction of any new structures in 100-year flood areas as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map. As a result, PAR 461 is not expected to expose people or structures to new significant flooding risks. Installation of compliant systems at existing affected facilities will not affect any existing risks from flood, inundation, etc. Consequently, PAR 461 would not affect in any way any potential flood hazards inundation by seiche, tsunami, or mud flow that may already exist relative to existing facilities.

Based upon the above considerations, significant adverse hydrology and water quality impacts are not expected from the implementation of PAR 461 and will not be further analyzed in this ~~Draft~~Final EA. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

X.a) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring systems to comply with PAR 461 may require additional piping or electrical conduit. PAR 461 would not require any new development or require substantial modifications to buildings or other structures to comply with the proposed amended rule. All of the affected activities occur within existing facility boundaries. Therefore, PAR 461 does not include any components that would require physically dividing an established community.

X.b) & c) There are no provisions in PAR 461 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by the construction or operation of vapor recovery and monitoring equipment. Therefore PAR 461 would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. Therefore, present or planned land uses in the region will not be significantly adversely affected as a result of the proposed rule.

Based upon these considerations, significant adverse land use and planning impacts are not expected from the implementation of PAR 461 and will not be further analyzed in this ~~Draft~~Final EA. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

XI.a) & b) There are no provisions in PAR 461 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. This conclusion is based on the fact that compliant systems typically do not require mineral resources such as sand, gravel, etc. Further, PAR 461 does not require siting new facilities over mineral resources of value, which would result in the loss of their availability.

Based upon the above considerations, significant adverse mineral resources impacts are not expected from the implementation of PAR 461 and will not be further analyzed in this ~~Draft~~Final EA. Since no significant mineral resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

XII.a) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect existing facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require installing additional piping or electrical conduit. Construction at the largest existing affected facility may require about 75 feet of trenching. As noted in the air quality analysis, trenching and construction activities are not expected to require a large number of construction equipment or large equipment that generates higher noise levels than small equipment. Thus, the proposed project is not expected to expose persons to the generation of excessive noise levels above current facility/residential levels. It is expected that any facility affected by PAR 461 will comply with all existing local noise control laws or ordinances. Further, vapor recovery and monitoring equipment do not generate excessive noise levels, so it is expected that operation of the equipment will not generate noise.

In commercial environments Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health. It is expected that

operators at affected facilities/residences will continue complying with applicable noise standards, which would limit noise impacts to workers, patrons and neighbors.

XII.b) PAR 461 is not anticipated to expose people to or generate excessive groundborne vibration or groundborne noise levels since only minor construction activities are expected to be necessary. Further, no physical changes to operations are expected to occur at the existing facilities because compliant systems are not expected to involve, in any way, equipment that generates vibrations. Since existing operations are not expected to generate excessive groundborne vibration or noise levels, and PAR 461 is not expected to alter physical operations, no groundborne vibration or noise levels are expected from the proposed amended rule.

XII.c) A permanent increase in ambient noise levels at the affected facilities above existing levels as a result of implementing the proposed project is unlikely to occur because there would be no change in physical operations at affected facilities. The existing noise levels are unlikely to change and raise ambient noise levels in the vicinities of the existing facilities to above a level of significance, because construction is limited and operation of monitoring and enhanced vapor recovery is not expected to generate noise.

XII.d) No increase in periodic or temporary ambient noise levels in the vicinity of affected facilities above levels existing prior to PAR 461 is anticipated because the proposed project would require minimal construction. As indicated earlier, operational noise levels are expected to be equivalent to existing noise levels, because vapor recovery and monitoring systems do not contain noise intensive equipment.

XII.e) & f) Even if an affected facility is located near a public/private airport, there are no new noise impacts expected from any of the existing facilities as a result of complying with the proposed project as explained in previous responses. Thus, PAR 461 is not expected to expose people residing or working in the vicinities of public airports to excessive noise levels.

Based upon these considerations, significant adverse noise impacts are not expected from the implementation of PAR 461 and are not further evaluated in this ~~Draft~~Final EA. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

XIII.a) The proposed project is not anticipated to generate any significant effects, either direct or indirect, on the district's population or population distribution as no additional workers are anticipated to be required to comply with the proposed amendments. It is expected that construction workers necessary to install vapor recovery and monitoring systems will be drawn from the existing labor pool in southern California. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 461. As such, PAR 461 would not result in changes in population densities or induce significant growth in population.

XIII.b) & c) Because the proposed project affects existing gasoline transfer and dispensing operations, PAR 461 is not expected to result in the creation of any industry that would affect population growth, directly or indirectly, induce the construction of single- or multiple-family units, or require the displacement of people or the construction of replacement housing elsewhere.

Based upon these considerations, significant adverse population and housing impacts are not expected from the implementation of PAR 461 and are not further evaluated in this ~~Draft~~Final

EA. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:			
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion

XIV.a) & b) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. Since PAR 461 would monitor and reduce the amount of fugitive VOCs emitted at affected facilities, it is not expected to increase the chances for fires or explosions requiring a response from local fire departments. As shown in the Section VIII - Hazards and Hazardous Material section of this ~~Draft~~Final EA, PAR 461 is not expected to generate significant explosion or fire hazard impacts. PAR 461 is not expected to have any adverse effects on local police departments for the following reasons. Police would be required to respond to accidental releases of hazardous materials during transport. Since PAR 461 does not require transport of hazardous material, and hazards impacts from implementing PAR 461 were concluded to be less than significant, potential impacts to local police departments are also expected to be less than significant.

XIV.c) & d) As indicated in discussion under item XIII. Population and Housing, implementing PAR 461 would not induce population growth or dispersion during either construction or operation. Therefore, with no increase in local population anticipated, additional demand for new or expanded schools or parks is not anticipated. As a result, no significant adverse impacts are expected to local schools or parks.

XIV.e) Besides building permits, there is no other need for additional government services in connection with complying with PAR 461. The proposal would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population and, as a result of implementing PAR 461; therefore, no need for physically altered government facilities.

Based upon these considerations, significant adverse public services impacts are not expected from the implementation of PAR 461 and are not further evaluated in this ~~Draft~~Final EA. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

XV.a) & b) As discussed under “Land Use and Planning” above, there are no provisions in the PAR 461 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements

would be altered by the changes proposed in PAR 461. The proposed project would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it will not directly or indirectly increase or redistribute population.

Based upon these considerations, significant adverse recreation impacts are not expected from the implementation of PAR 461 and are not further evaluated in this ~~Draft~~Final EA. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVI. SOLID/HAZARDOUS WASTE. Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

XVI.a) PAR 461, which codifies CARB's Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require additional piping or electrical conduit. Construction at the largest existing affected facility may require about 75 feet of trenching. Trenching is expected to require demolition, removal, and disposal of small portions of the concrete surface at these facilities. The areas disturbed are expected to be re-paved.

As indicated for the analyses of impacts to other environmental topic areas, CARB's Phase II EVR regulation would go into affect regardless of whether or not PAR 461 is adopted. Consequently, solid waste impacts from activities to comply with the Phase II EVR requirements, are generated by CARB's Phase II EVR, not PAR 461. Review of documentation

for CARB's Phase II EVR regulation indicates that the potential solid waste impacts were not quantified. So, background information on potential solid waste impacts generated by the EVR regulation is provided in the following paragraphs.

Table 2-1 in the Air Quality Analysis presents the distribution of gasoline dispensing facilities. Early certification under PAR 461 would result in four facilities per day that would need trenching and paving in addition to installation of Phase II EVR equipment and six facilities per day that would need only installation of Phase II EVR equipment. The remaining facilities that would comply between October 2008 and April 2009 would result in two facilities per day that would need trenching and paving in addition to installation of Phase II EVR equipment and two facilities per day that would need only installation of Phase II EVR equipment. Therefore, the worst-case day would occur during the early installation of Phase II EVR equipment.

Based on the assumption that 75 feet of concrete would need to be removed and trenched for piping and conduit at four affect early certification facilities, approximately 33 tons of concrete would need to be disposed of on any given day. Facility operators may also need to dispose of minor quantities of piping and conduit. Hoses and nozzles may need to be replaced. It is estimated that the piping, conduit, hoses and nozzles would be less than 20 tons per day from ten facilities. Facility operators may change out older gasoline dispensers at the same time construction is completed for PAR 461, but the replacement of gasoline dispensers is not required by PAR 461, and therefore, not included in the estimate of solid waste. Therefore, approximately 53 tons of waste (33 tons of concrete + 20 tons of old dispensing equipment) may need to be sent to landfills on any one day.

Construction-related waste would likely be disposed of at a Class II (industrial) or Class III (municipal) landfill. There are 48 Class II/Class III landfills within the SCAQMD's jurisdiction. The total daily permitted disposal capacity of district landfills is approximately 93,979 tons per day⁵. The disposal of 53 tons of solid waste per day would be 0.06 percent of the daily permitted capacity, which is well within the disposal capacity of district landfills. Therefore, solid waste disposal from CARB's Phase II EVR regulation would not be significant.

Since PAR 461 would involve trenching at facilities that involve gasoline transfer and dispensing operations there is potential for construction operations to unearth contaminated soil. The probability of encountering contaminated soil is small since many facility operators have remediated soil contamination at their sites in connection with complying with double containment requirements for gasoline storage tanks to comply with the California Underground Storage Tank Law and Regulations (CCR, Title 23, Division 3, Chapter 16, Underground Tank Regulations). If contaminated soil is discovered during construction activities, it is required to be handled per applicable requirements, including Title 22, California Code of Regulations (CCR), Chapter 12 and SCAQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. If hazardous materials are encountered (e.g., asbestos, contaminated soil), they will be properly classified in accordance with local, state and federal regulations and appropriately handled, managed, transported, and disposed.

Therefore, PAR 461 is not expected to exceed the capacity of designated landfills.

⁵ SCAQMD. 2007. Final Program Environmental Impact Report for the 2007 Air Quality Management Plan. (SCH. No.2006111064).

XVI.b) Existing facility operators are expected to comply with federal, state and local statutes related to solid and hazardous wastes. Since the operations of PAR 461 would only require monitoring and enhanced vapor recovery, PAR 461 is not expected to change the categorization of waste or increase waste from operations. PAR 461 is not expected to cause an increase in growth in existing operators or new affected facilities. Therefore, affected facility operators are expected to continue to comply with federal, state and local statutes related to solid and hazardous wastes.

Based on these considerations, PAR 461 is not expected to significantly increase the volume of solid or hazardous wastes disposed at existing municipal or hazardous waste disposal facilities or require additional waste disposal capacity. Further, implementing PAR 461 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations. Since no solid/hazardous waste impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC. Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access or?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection’s volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

Discussion

XVII.a) & b) PAR 461, which codifies CARB’s Phase II EVR regulations, would only affect facilities with gasoline transfer and dispensing operations. Facility operators affected by PAR 461 would need to install required vapor recovery and monitoring equipment. The additional vapor recovery and monitoring system may require additional piping or electrical conduit. Construction at the largest existing affected facility may require about 75 feet of trenching. The areas disturbed are expected to be re-paved.

SCAQMD staff estimates two heavy-duty diesel trucks per day and three worker vehicles per facility during construction. During construction, gasoline transfer and dispensing operations would cease, so daily traffic for gasoline fueling and delivery would halt. These assumptions are expected to be the same whether or not PAR 461 is adopted, since PAR 461 would only accelerate the compliance of CARB’s Phase II EVR regulations. The same construction is expected, but started earlier to finish by October 1, 2008. PAR 461 is expected to increase the number of facilities that comply per day between adoption and October 1, 2008. But since the facilities are spread through the Basin, the two heavy-duty diesel trucks per day and three

workers at ten facilities per day is not expected to adversely affect transportation. The proposed rule would not change or cause additional operational transportation demands or services. Therefore, the implementation of PAR 461 is not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities.

XVII.c) Construction for PAR 461 would be limited to trenching and equipment replacement on-site. None of the equipment used or installed is expected to be taller than existing equipment on-site. Vapor recovery and monitoring equipment are not expected to be transported by plane, so plane traffic could not increase as a result of complying with PAR 461. Therefore, PAR 461 is not expected to affect air traffic in any way in the region.

XVII.d) Since PAR 461 only affects equipment on-site, no offsite modifications to roadways are anticipated for the proposed project that would result in an additional design hazard or incompatible uses.

XVII.e) The profile and locations of equipment at existing facilities are not expected to change substantially. PAR 461 may require re-routing of piping or conduit below ground, which could temporarily impede emergency access at affected facilities. Since construction at any one facility is expected to last a week or less, this affect is considered to be temporary. Therefore, no changes are expected to emergency access at or in the vicinity of the affected facilities.

XVII.f) PAR 461 would require parking for workers and delivery vehicles during construction. However, since only three construction workers are expected to be needed to install equipment at affected facilities, it is likely that sufficient parking will be available to accommodate these workers. Operations would not require any additional employees, so additional parking capacity would not be required. Therefore, the project is not expected to result in inadequate parking capacity.

XVII.g) Since PAR 461 only requires the installation of monitoring and enhanced vapor recovery equipment, the implementation of PAR 461 would not result in conflicts with adopted policies related to alternative transportation, such as bus turnouts, bicycle racks, et cetera.

Based upon these considerations, PAR 461 is not expected to generate significant adverse transportation/traffic impacts and, therefore, this topic will not be considered further. Since no significant transportation/traffic impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

XVIII.a) As discussed in the “Biological Resources” section, PAR 461 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because PAR 461 is expected to require only minor construction activities at affected existing facilities and operations are not expected to change. All activity is expected to occur within the boundaries of existing facilities that have already been greatly disturbed and that currently do not support animal species or the habitates on which these rely. Affected facilities are typically devoid of plants for fire safety reasons. Additionally, PAR 461 does not require or induce development of any new land use projects that could affect biological resources.

XVIII.b) Based on the foregoing analyses, since PAR 461 will not generate any project-specific significant environmental impacts, PAR 461 is not expected to cause cumulative impacts in conjunction with other projects that may occur concurrently with or subsequent to the proposed project. Related projects to the currently proposed project include existing and proposed rules and regulations, as well as AQMP control measures. Furthermore, because PAR 461 does not generate project-specific impacts, cumulative impacts are not consider to be "cumulatively considerable” as defined by CEQA guidelines §15065(a)(3). For example, the environmental topics checked ‘No Impact’ (e.g., aesthetics, agriculture resources, biological resources, cultural resources energy, geology and soils, hydrology and water quality, land use and planning, mineral

resources, noise, population and housing, public services, recreation, solid/hazardous waste and transportation and traffic) would not be expected to make any contribution to potential cumulative impacts whatsoever. For the environmental topic checked 'Less than Significant Impact' (e.g., air quality, hazards and hazardous materials), the analysis indicated that project-specific impacts would not exceed any relevant project-specific significance thresholds. This conclusion is based on the fact that the analyses for each of these environmental areas concluded that the incremental effects of the proposed project would be minor and, therefore, not considered to be cumulatively considerable. Also, in the case of air quality impacts, the net effect of implementing the proposed project with other proposed rules and regulations, and AQMP control measures is an overall reduction in district-wide emissions contributing to the attainment of state and national ambient air quality standards for ozone and PM2.5. Therefore, it is concluded that PAR 461 has no potential for significant cumulative or cumulatively considerable impacts in any environmental areas.

XVIII.c) Based on the foregoing analyses, PAR 461 is not expected to cause significant adverse effects on human beings. Significant adverse air quality impacts are not expected from the implementation of PAR 461. Based on the preceding analyses, no significant adverse impacts to aesthetics, agriculture resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid/hazardous waste and transportation and traffic are expected as a result of the implementation of PAR 461.

As discussed in items I through XVIII above, the proposed project has no potential to cause significant adverse environmental effects.

APPENDIX A

PROPOSED AMENDED RULE 461

In order to save space and avoid repetition, please refer to the latest version of the PAR 461 located elsewhere in the final rule package. The PAR 461 version of the proposed amended rule circulated with the Draft EA released on January 22, 2008 for a 30-day public review and comment period ending February 20, 2008 has been updated but, as noted in the preface, the changes do not require the EA to be recirculated.

Original hard copies of the Draft EA, which include PAR 461 version of the proposed amended rule circulated with the Draft EA, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B

ASSUMPTIONS AND CALCULATIONS

**Table B-1
Number of Facilities**

Description	Existing GDF	Applications Submitted	Early PAR 461	Remaining PAR 461
Total Number of Facilities	4,500	1,000	2,100	1,400
Facilities that Need Construction	1,800	400	840	560
Facilities with Installation Only	2,700	600	1,260	840
Facilities that Need Construction, Daily			3.9	1.5
Facilities with Installation Only, Daily			5.9	2.3

Assumed 60 percent of remaining applications would comply with EVR regulations by October 1, 2008.

Assumed early installation would occur between March and October (214 days).

**Table B-2
Trenching Emissions**

Construction Activity				
Internal Combustion Engine and Equipment Installation				
Construction Schedule		1 days		
Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size	
Concrete/Industrial Saws	1	4.0	3	
Tractors/Loaders/Backhoes	1	4.0		
Forklifts	1	2.0		

Construction Equipment Combustion Emission Factors						
	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type^c	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Concrete/Industrial Saws	0.449	0.764	0.064	0.156	0.001	58.5
Tractors/Loaders/Backhoes	0.414	0.830	0.064	0.131	0.001	66.8
Forklifts	0.250	0.643	0.035	0.086	0.001	54.4

Table B-2 (Continued)
Trenching Emissions

Construction Vehicle (Mobile Source) Emission Factors						
	CO lb/mile	NOx lb/mile	PM10 lb/mile	VOC lb/mile	SOx lb/mile	CO2 lb/mile
Heavy-Duty Truck ^d	0.01446237	0.04718166	0.00230900	0.00372949	0.00003962	4.221844935
Passenger Vehicle	0.01155158	0.00121328	0.00008447	0.00118234	0.00001078	1.106722361

Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Trucks ^e	2	20
Worker Vehicles	3	10

Incremental Increase in Onsite Idling Emissions from Onroad Mobile Vehicles						
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)						
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Concrete/Industrial Saws	1.79	3.06	0.26	0.62	0.003	234
Rubber Tired Loaders	1.66	3.32	0.26	0.52	0.003	267
Forklifts	0.50	1.29	0.07	0.17	0.001	109
Total	3.95	7.66	0.58	1.32	0.007	610

**Table B-2 (Concluded)
Trenching Emissions**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles						
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)						
Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Flatbed Trucks	1.157	3.775	0.1847	0.2984	0.0032	338
Worker Vehicles	0.693	0.073	0.0051	0.0709	0.0006	66
Total	1.85	3.85	0.19	0.37	0.00	404

Total Incremental Combustion Emissions from Construction Activities						
Sources	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Daily Emissions	5.8	11.5	0.8	1.7	0.011	1,014

Combustion and Fugitive Summary	PM2.5 Fraction^h	PM10 lb/day	PM2.5 lb/day
Combustion, Offroad	0.92	0.6	0.5
Combustion, Onroad	0.964	0.2	0.18
Total, lb		0.8	0.7

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2002 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadHHDT05_25.xls
- e) Assumed haul truck travels 20 miles one-way
- g) SCAQMD Regional Construction Significance Thresholds
- h) ARB's CEIDARS database PM2.5 fractions - construction dust category for offroad and onroad diesel vehicle exhaust category for combustion.

**Table B-3
Equipment Installation Emissions**

Construction Activity				
Internal Combustion Engine and Equipment Installation				
Construction Schedule		3 days		
Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size	
Forklifts	1	2.0	3	
Welder	1	2.0		
Generator Sets	1	2.0		

Construction Equipment Combustion Emission Factors						
	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type^c	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Forklifts	0.250	0.643	0.035	0.086	0.001	54.4
Welders	0.234	0.319	0.030	0.092	0.000	25.6
Generator Sets	0.355	0.725	0.045	0.113	0.001	61.0

Construction Vehicle (Mobile Source) Emission Factors						
	CO	NOx	PM10	VOC	SOx	CO2
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck ^d	0.01446237	0.04718166	0.00230900	0.00372949	0.00003962	4.221844935
Passenger Vehicle	0.01155158	0.00121328	0.00008447	0.00118234	0.00001078	1.106722361

**Table B-3 (Continued)
Equipment Installation Emissions**

Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Haul Trucks ^e	2	20
Worker Vehicles	3	10

Incremental Increase in Onsite Idling Emissions from Onroad Mobile Vehicles						
Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)						
Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Forklifts	0.50	1.29	0.07	0.17	0.00	109
Welder	0.47	0.64	0.06	0.18	0.00	51
Generator Sets	0.71	1.45	0.09	0.23	0.00	122
Total	1.68	3.37	0.22	0.58	0.003	282

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles						
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)						
Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Flatbed Trucks	1.157	3.775	0.1847	0.2984	0.0032	338
Worker Vehicles	0.693	0.073	0.0051	0.0709	0.0006	66
Total	1.85	3.85	0.19	0.37	0.00	404

**Table B-3 (Concluded)
Equipment Installation Emissions**

Total Incremental Combustion Emissions from Construction Activities						
Sources	CO lb/day	NO_x lb/day	PM₁₀ lb/day	VOC lb/day	SO_x lb/day	CO₂ lb/day
Daily Emissions	3.5	7.2	0.4	1.0	0.007	686

Combustion and Fugitive Summary	PM_{2.5} Fraction^h	PM₁₀ lb/day	PM_{2.5} lb/day
Combustion, Offroad	0.92	0.2	0.2
Combustion, Onroad	0.964	0.2	0.18
Total, lb		0.4	0.4

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) SCAB values provided by the ARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2002 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadHHDT05_25.xls
- e) Assumed haul truck travels 20 miles one-way
- g) SCAQMD Regional Construction Significance Thresholds
- h) ARB's CEIDARS database PM_{2.5} fractions - construction dust category for offroad and onroad diesel vehicle exhaust category for combustion.

**Table B-4
Equipment Paving Emissions**

Example Three Acre Site	Construction Activity Architectural Coating and Asphalt Paving of Parking Lot
Construction Schedule -	1 days^a

Equipment Type^{a,b}	No. of Equipment	hr/day	Crew Size
Paving Equipment	1	4.00	8
Plate Compactors	1	2.00	
Cement and Mortar Mixers	1	3.00	
Tractors/Loaders/Backhoes	1	2.00	

Construction Equipment Combustion Emission Factors						
Equipment Type^c	CO lb/hr	NOx lb/hr	PM10 lb/hr	VOC lb/hr	SOx lb/hr	CO2 lb/hr
Paving Equipment	0.469	1.033	0.071	0.156	0.001	69.0
Plate Compactors	0.026	0.035	0.002	0.005	0.000	4.3
Cement and Mortar Mixers	0.046	0.069	0.005	0.012	0.000	7.2
Tractors/Loaders/Backhoes	0.414	0.830	0.064	0.131	0.001	66.8

Construction Vehicle (Mobile Source) Emission Factors						
	CO lb/mile	NOx lb/mile	PM10 lb/mile	VOC lb/mile	SOx lb/mile	CO2 lb/mile
Heavy-Duty Truck ^d	0.01446237	0.04718166	0.00230900	0.00372949	0.00003962	4.221844935

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One-Way Trip Length (miles)
Delivery Truck ^e	2	20

Table B-4 (Continued)
Equipment Paving Emissions

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Paving Equipment	1.88	4.13	0.28	0.62	0.0032	275.81
Plate Compactors	0.05	0.07	0.00	0.01	0.0001	8.63
Cement and Mortar Mixers	0.14	0.21	0.01	0.04	0.0003	21.74
Tractors/Loaders/Backhoes	0.83	1.66	0.13	0.26	0.0016	133.61
Total	2.9	6.1	0.4	0.9	0.005	439.79

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Delivery Truck	1.16	3.78	0.185	0.298	0.00317	337.7
Total	1.16	3.78	0.19	0.30	0.0032	337.7

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Daily Emissions	4.1	9.8	0.6	1.2	0.0084	778

**Table B-4 (Concluded)
Equipment Paving Emissions**

Combustion and Fugitive Summary	PM2.5 Fraction^h	PM10	PM2.5
		lb/day	lb/day
Combustion (Offroad)	0.92	0.4	0.4
Combustion (Onroad)	0.96	0.19	0.18
Fugitive	0.21	0	0.0
Daily Emissions		0.6	0.6

Notes:

a) SCAQMD, estimated from survey data, Sept 2004

b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.

c) SCAB values provided by the ARB, May 2007. Assumed equipment is diesel fueled.

d) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2007, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT

e) Assumed haul truck travels 0.1 miles through facility

f) Assumed six foot wide water truck traverses over 140,000 square feet of disturbed area

g) Illustration purpose showing the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.

h) ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

**Table B-5
Criteria Emissions Summary**

Description	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOx, lb/day
Trenching, Four Facilities	23.2	46.0	3.1	2.9	6.8	0.0
Installation, Six Facilities	21.2	43.3	2.4	2.3	5.7	0.0
Paving, Four Facilities	16.2	39.4	2.4	2.3	4.9	0.0
Maximum*	44.4	89.4	5.5	5.2	12.5	0.1
Significance Threshold	550	100	150	55	75	150
Significant?	No	No	No	No	No	No

* Assumes four facilities per day would need trenching or paving and six facilities would need installation on a maximum day.

**Table B-5
CO2 Emissions Summary**

Description	CO2, lb/facility	CO2, ton/project	CO2, metric ton/project
Trenching	1,014	913	828
Installation	676	913	828
Paving	778	700	635
Total	2,468	2,525	2,291

Includes all EVR facilities including those that are already completed.

Assumes one day of trenching and one day of paving at 1,400 facilities and three days of installation at 3,500 facilities.

**Table B-5
Concrete Waste Estimates**

Length, ft	Width, ft	Depth, ft	Volume, cf
75	3	0.50	113

Density of Concrete, lb/cf	Concrete per Facility, ^a ton/day	Total Concrete, ton/day
145	8	33

a) Assumes four facilities per day

Total Waste, ^b ton/day	Capacity, ^c ton/day	Percent of Capacity
55	93,979	0.06

b) Assumes concrete waste plus 10 tons of hose and nozzle waste.

c) 2007 AQMP

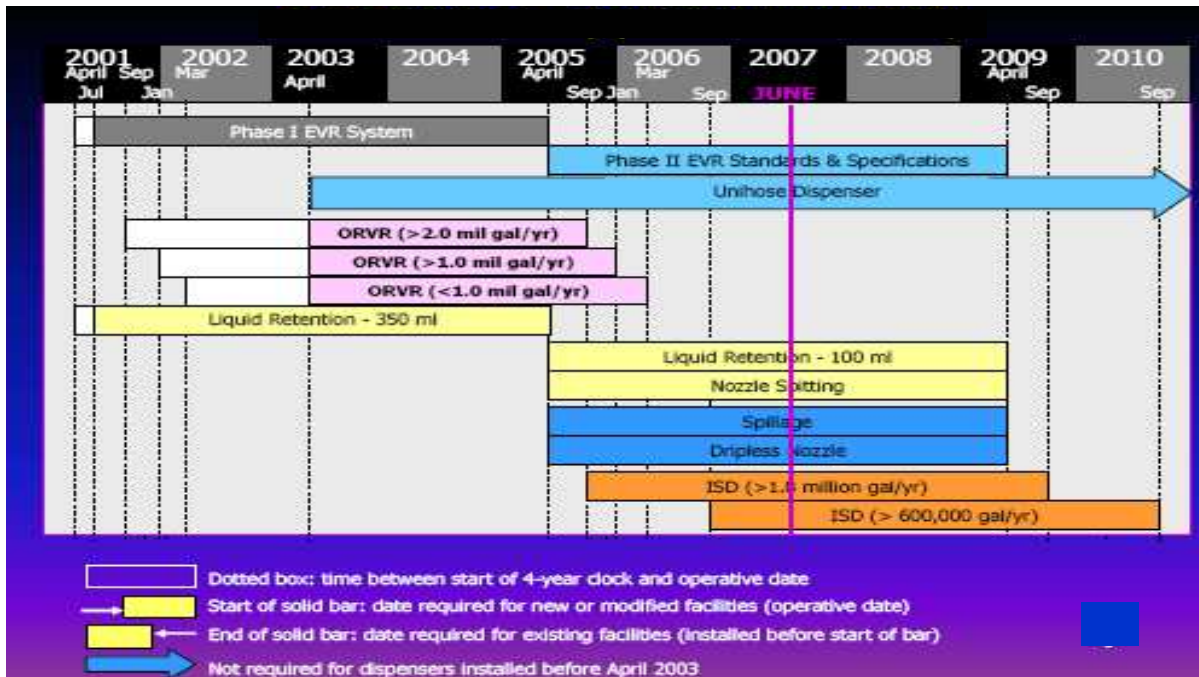
APPENDIX C

CONTROL TECHNOLOGY – ENHANCED VAPOR RECOVERY

Enhanced Vapor Recovery

The purpose of CARB's EVR regulations are to upgrade the performance standards for both Phase I and Phase II vapor recovery systems and provide GDFs with vapor recovery systems with enhanced leak control. EVR Phase I was completed in April 2005 and compliance with Phase II is progressing (see Table C-1). CARB's EVR regulation includes the six modules for both Phase I and Phase II vapor recovery systems described in the following subsections:

Figure C-1 - EVR Timeline (Updated June 2006)



Source: PAR 461 Draft Preliminary Staff Report, 2008.

Module 1: Phase I Vapor Recovery

The objective of EVR Phase I is to improve the vapor recovery efficiency when filling USTs, Phase I from 95 percent to 98 percent which is equivalent to an emission limit of 0.15 lbs/1,000 gallons using a summer uncontrolled emissions rate of 7.6 lbs/1,000 gallons (CP-201, Section 3.1).

Currently, five EVR Phase I have been certified by CARB: Phil Tite (E.O. VR-101), OPW (E.O. VR-102), EBW (E.O. VR-103), CNI Manufacturing (E.O. VR-104), and EMCO Wheaton Retail (E.O. VR-105). All EVR Phase I certified systems include rotating adaptors, a spill containment box, submerged fill tubes with side drain valves, and pressure-vacuum (P/V) relief valves (threaded not slip-on). Additionally, the EVR regulations require that Phase I components must be compatible with fuel blends that are commonly used in California and that all connectors and fittings to be leak-free.

The EVR Phase I implementation started in April 2001 and was completed in April 2005. The VOC/toxic emission reductions associated with EVR Phase I implementation is estimated at 5.5 tons per day statewide and 2.41 tons per day in the district. Emission reductions associated with the EVR Phase I in the district is calculated based on the percentage of the total gallons of gasoline dispensed in the district (seven billion per year) and the state (16 billion per year).

Module 2: Phase II Vapor Recovery

The EVR Phase II extends the certification tests and expands the tests requirements during certifications to thoroughly address the durability and reliability issues of the vapor recovery components. Additionally, the EVR regulation limits the certification to four years with the renewal contingent on successfully addressing problems that have occurred during the preceding four year period.

The EVR Phase II systems comprise several new standards including ORVR compatibility, more stringent spillage and “dripless nozzles” requirements, in-station diagnostics, and storage tank pressure limits.

To control vapor pressure in the USTs and minimize related fugitive emissions, the EVR established the USTs’ pressure profiles to monitor vapor pressure in the USTs during operations (excluding periods where pressure changes are due to Phase I operations such as fuel drop). The pressure profiles include: 1) the daily average pressure shall not exceed 0.25 inches water column, 2) the daily high pressure shall not exceed 1.5 inches water column, and 3) the pressure difference during the non-excluded hours shall be within ± 0.05 inches water column. Upon the full implementation of the ISD systems, the pressure of the USTs will be continuously monitored. The EVR regulation substitutes the 95 percent efficiency requirement of Phase II vapor recovery systems with the emission limit of 0.38 pound per 1,000 gallons. As provided in CP-201, systems certified under summer fuel conditions must meet both the efficiency and emission factor requirements. Systems certified using winter fuel must meet either the efficiency or the emission factor requirements.

Compliance with EVR Phase II requirement implementation commenced in April 2005 and is required by state law to be completed by April 1, 2009. The VOC (which includes toxic components) emission reductions associated with EVR Phase II (module 2) is estimated at 3.1 tons per day statewide and 1.36 tons per day in the district.

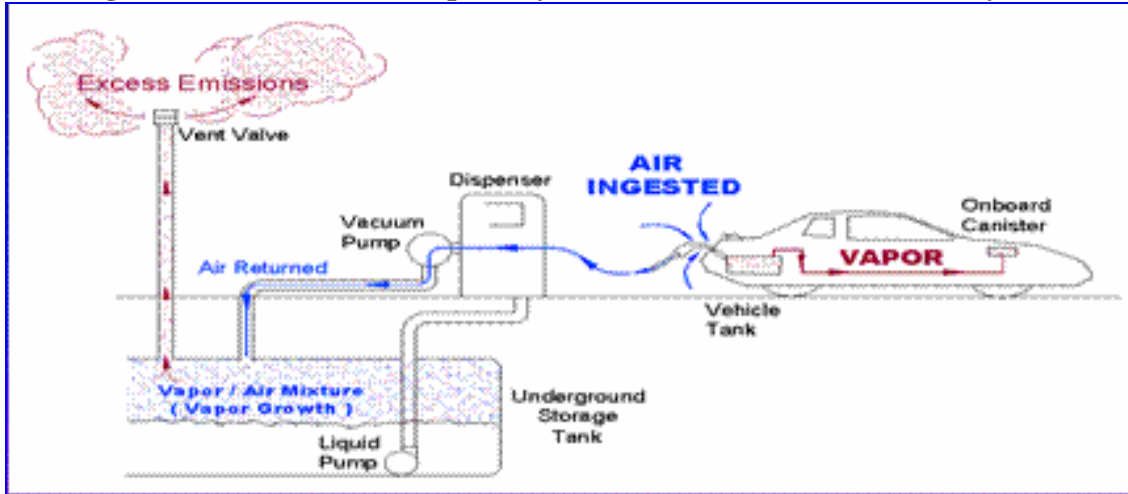
Module 3: On-Board Refueling Vapor Recovery

The ORVR is mandated by Title 13 California Code of Regulations (CCR), Section 1978 or 40 Code of Federal Regulation (CFR) Part 86. The ORVR systems were introduced in 1998 model vehicles and are now required on all new cars and light-duty trucks.

During motor vehicle refueling, the ORVR routes the vapors from the vehicle gas tank to activated carbon packed canister, which adsorbs the vapors. The ORVR vapor recovery mechanism seems to affect the vapor pump function of the vacuum assist systems (such as Healy G-70-186), which may lead to air ingestion into the USTs, as illustrated in Figure (4). To avoid the air ingestion, the nozzles of the vacuum assist systems are equipped with sensors to detect the ORVR vehicles and turns off assist vapor pump, as illustrated in Figure (4). The balance system does not utilize a vapor pump, so no forced air is ingested into the UST. During the vehicle operation, the ORVR draws the vapor (desorbs) into the engine intake and it is combusted.

The ORVR compliance implementation started in April 2003 and was completed in April 2006. The VOC emission reductions associated with the ORVR are estimated at 4.5 tons per day statewide and 1.97 tons per day in the district.

Figure C-2 – Potential Incapability of ORVR and Vacuum Assist System



Source: PAR 461 Draft Preliminary Staff Report, 2008.

Module 4: Liquid Retention and Nozzle Spitting

The liquid retention and nozzle spitting “pseudo spillage” is a previously unregulated source of VOC emissions. The emissions occur when liquid gasoline contained in the hanging hardware (nozzles and hoses) is allowed to evaporate into the atmosphere between vehicles fueling.

The liquid retention limit of 350 milliliters per 1,000 gallons was implemented in April 2001, with final compliance by April 2005. The liquid retention limit of 100 milliliters per 1,000 gallons and the nozzle spitting requirements were implemented in April 2005, with final compliance by April 2009. The VOC emission reductions associated with the liquid retention and nozzle spitting is estimated at 0.2 ton per day statewide and 0.09 ton per day in the AQMD.

Module 5: Spillage and Dripless Nozzle

The EVR regulation requires reducing the spillage from 0.42 pound per 1,000 gallons to 0.24 pound per 1,000 gallons limit and limits the number of drops to one drop per fueling event.

Module 6: In-Station Diagnostics

The ISD provides continuous monitoring of important emission-related vapor recovery system parameters and components and alerts the station operator when certain failure modes are detected so that corrective actions can be taken. The ISD provides two consecutive alerts; the first is the ~~degradation~~ warning alert and the second is the ~~gross~~ failure alert. The ~~degradation~~ warning alert requires the operator to notify a responsible company official or designee, request service as soon as reasonably possible and keep records of the events. If the defective fueling points are not repaired, the ~~gross~~ failure alert will take place after seven calendar days and will shut down the defective fueling points of the entire system, in case of vapor recovery system failure. The ~~gross~~ failure alert requires the operator to repair or isolate and not use the defective fueling points and keep records. The reset button of the ISD system shall not be used until all the defective fueling points are repaired or isolated and not used.

The implementation of the ISD is phased-in based on the annual throughput of the GDFs. For GDFs with throughput of more than 1.8 million gallons per year, the ISD compliance requirement started in September 2005 and shall be completed by September 2009. For GDFs with throughput of more than 600,000 gallons per year, the ISD compliance requirement started in September 2006 and shall be completed by September 2010. The VOC emission reduction

associated with the ISD implementation is estimated to be 8.5 tons per day statewide and 3.72 tons per day in the district.

The total VOC emission reductions associated with the implementation of EVR, including ISD, is estimated to be 25.7 tons per day statewide and 11.24 tons per day in the district.

CARB Certified Phase II EVR

I. Vacuum Assist Systems (Healy)

The Phase II EVR vacuum assist systems are manufactured by Franklin Fueling Systems (Healy) and were certified by CARB on May 9, 2007. The certifications of the vacuum assist system include Executive Order VR-201-C for the Phase II EVR without the ISD and Executive Order VR-202-C for the Phase II EVR with the ISD.

The major system specifications include the Healy Model 900 nozzle, vapor collection, breakaway couplings, flow limiters and clean air separators. The Healy Model 900 nozzle has an integral vapor valve to prevent the loss of vapor from the underground storage tank and prevent the ingestion of air into the system. The maximum allowable leak rates for the nozzle are 0.038 cubic feet per minute (CFM) at a pressure of two inches water column and 0.10 CFM at a vacuum of one hundred inches water column.

The vapor to liquid (V/L) ratio of the system must be 1.05 plus or minus 0.10 (0.95 to 1.15), measured at flow rate between six and ten gallons per minute.

In the event of a “drive off”, testing is required after reconnecting the breakaway to ensure proper operation and no observed leaks. The testing shall be conducted as specified in Healy Systems Scheduled Maintenance.

The flow limiter is required when the flow rate is greater than ten gallons per minute to comply with the U.S. EPA requirements.

The clean air separator is a passive tank pressure management system with no electrical requirements. The separator shall be installed within 100 feet from the vent pipe(s), tested (leak-decay) and maintained vapor-tight and in proper operating configuration.

In the district, as of January 9, 2008, there are 187 GDFs that have installed and operating the Phase II EVR vacuum assist systems. SCAQMD has received approximately 700 applications for the Phase II.EVR and 520 permits to construct have been issued.

II. Balance System (VST)

The EVR Phase II balance system without ISD is manufactured by the Vapor Systems Technology (VST) and was certified by CARB on November 5, 2007 (Executive Order VR-203-A). The Phase II EVR balance system with the ISD is scheduled for CARB certification in ~~February—March~~ April 2008 (Executive Order VR-204 A). SCAQMD has received four Phase II EVR balance system applications. The major components of the VST balance total system are described in the following subsection for the Phase II EVR system:

VST ENVIRO-LOC Balance Nozzle

The VST balance nozzle, in general, is similar to the conventional balance nozzle that is currently in use. It includes both fluid and vapor passages and is equipped with a boot, face plate and

interlock device to assure a vapor-tight seal around the vehicle fill-pipe. The nozzle has an automatic shutoff to stop the liquid flow once the vehicle fill-pipe is filled with liquid. The new features of the VST balance nozzle are the positive seal of the vapor valve when the nozzle is not in use and a substantially dripless spout using a spring-based poppet valve.

VST ENVIRO-LOC Balance Vapor Recovery Hose Assembly

The VST balance vapor recovery hose assembly uses a coaxial hose assembly which includes an inner liquid hose 5/8 inch in diameter made of rubber, wire braid reinforcement and rubber outer cover and an outer vapor hose 1 ½ inches in diameter made of polyurethane. The hose assembly, including the breakaway, is approximately 10 feet long. The vapor hose includes a liquid removal device (VDV series) to remove condensate vapors and maintain a clear vapor path.

VST ENVIRO-LOC Balance Safety Breakaway

The breakaway device prevents substantial damage to the dispenser when a “drive off” occur with the nozzle still in the vehicle fill-pipe. The VST breakaway consists of two halves, one attached to the whip hose and the other attached to the curb hose. The two halves of the breakaway are attached by two fracturable rings designed to break at 350 pounds maximum load. Each breakaway half has both fluid and vapor passages and each passage has a spring-loaded poppet. Upon fracture of the rings and separation of the two halves, all of the spring-loaded poppets move to the seal position, which closes off both the liquid and vapor passes in both directions.

VST ENVIRO-LOC Balance ECS Membrane Processor

The VST ECS membrane processor controls the pressure in the UST to within limits specified by CARB. The semi-permeable membrane will allow air components such as oxygen, nitrogen, water vapor and less than 3.0 percent of the hydrocarbon to vent to the atmosphere, while saturated hydrocarbon vapor is returned to the UST. The membrane processor is designed to turn on (operate) and off at 0.20 inch to minus 0.20 inch water column, respectively. Under normal operating conditions of the VST balance system, a predominantly negative pressure will be produced in the ullage space (space within a fuel tank above the liquid fuel) of the UST and the membrane processor will not need to operate. During periods of less activity, shutdown, presence of winter fuel (high vapor pressure), or other conditions that promotes the pressurization of the ullage, the membrane processor will operate to control the pressure in the ullage to an accepted level.

APPENDIX D

COMMENT LETTER AND RESPONSE TO COMMENT



COUNTY OF ORANGE

RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Bryan Speagle, Director
300 N. Flower Street
Santa Ana, CA
P.O. Box 4048
Santa Ana, CA. 92702-4048
Telephone: (714) 834-2300
Fax: (714) 834-5188

NCL 08-0

February 19, 2008

Mr. James Koizumi
South Coast Air Quality
Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182

**SUBJECT: Draft Environmental Assessment (EA) -- Proposed Amended Rule 461 --
Gasoline Transfer and Dispensing**

Dear Mr. Koizumi:

The above mentioned item is a Draft EA to analyze environmental impacts from the project identified above pursuant to its certified regulatory program.

1-1

The County of Orange has reviewed the Draft EA and has no comments at this time. However, we would like to be advised of any further developments.

If you have any questions, please contact Mary Ann Jones at (714) 834-5387.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald L. Tippetts".

Ronald L. Tippetts, Chief
Current and Environmental Planning

**Responses to Comment Letter #1
County of Orange
February 19, 2008**

Response 1-1

SCAQMD staff understands that the County of Orange has no comments on the Draft EA. SCAQMD staff thanks the County of Orange for their interest in PAR 461. The proposal will be presented to the SCAQMD Governing Board at the March 7, 2008 meeting.