

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment for:

Proposed Amended Rule 1173 – Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

May 1, 2007

SCAQMD No. 032307BAR

Executive Officer

Barry R. Wallerstein, D. Env.

Deputy Executive Officer

Planning, Rules, and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer

Planning, Rules, and Area Sources

Laki Tisopulos, Ph.D., P.E.

Planning and Rules Manager

CEQA and Socioeconomic Analysis

Susan Nakamura

Author: Barbara Radlein Air Quality Specialist

Technical

Assistance: Kennard Ellis Air Quality Specialist

Reviewed By: Steve Smith, Ph.D. Program Supervisor, CEQA
Larry Bowen, P.E. Manager, Planning and Rules
Ed Muehlbacher, P.E. Program Supervisor
John Olvera Senior Deputy District Council

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

CHAIRMAN: **WILLIAM A. BURKE, Ed.D.**
Speaker of the Assembly Appointee

VICE CHAIRMAN: **S. ROY WILSON, Ed.D.**
Supervisor, Fourth District
Riverside County Representative

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County Representative

BILL CAMPBELL
Supervisor, Third District
Orange County Representative

JANE W. CARNEY
Senate Rules Committee Appointee

RONALD O. LOVERIDGE
Mayor, City of Riverside
Cities Representative, Riverside County

GARY OVITT
Supervisor, Fourth District
San Bernardino County Representative

JAN PERRY
Councilmember, Ninth District
Cities Representative, Los Angeles County, Western Region

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

TONIA REYES URANGA
Councilmember, City of Long Beach
Cities Representative, Los Angeles County, Eastern Region

VACANT
Governor's Appointee

DENNIS YATES
Mayor, City of Chino
Cities Representative, San Bernardino County

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

PREFACE

This document constitutes the Final Environmental Assessment (EA) for the Proposed Amended Rule 1173 – Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants. The Draft EA was released for a 30-day public review and comment period from March 28, 2007 to April 26, 2007. No comment letters were received from the public.

To ease in identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~striketrough~~. 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 the Proposed Amended Rule 1173 – Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants.

TABLE OF CONTENTS

CHAPTER 1 - PROJECT DESCRIPTION

Introduction	1-1
California Environmental Quality Act.....	1-2
Project Location	1-3
Project Objective	1-3
Project Background.....	1-4
Project Description	1-6

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction	2-1
General Information.....	2-1
Environmental Factors Potentially Affected.....	2-2
Determination	2-3
Environmental Checklist and Discussion	2-4

APPENDIX A - Proposed Amended Rule 1173

APPENDIX B - Fugitive VOC Emission Calculations After LDAR

LIST OF FIGURES

Figure 1-1 – South Coast Air Quality Management District	1-3
--	-----

LIST OF TABLES

Table 2-1 – SCAQMD Air Quality Significance Thresholds	2-9
Table 2-2 – Estimated Emissions Inventory & Emission	
Reductions For Components at Lubricating Oil	
and Grease Re-Refiners and Marine Terminals.....	2-11

CHAPTER 1

PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Objective

Project Background

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 compliance with 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 Draft 2007 AQMP concluded that major reductions in emissions of volatile organic compounds (VOCs), oxides of sulfur (SOx) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone (the key ingredient of smog) and particulate matter (PM10 and 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 and to contribute to the formation of PM10 and PM2.5.

With stationary and mobile sources being the major producers of VOC emissions, which contribute to ozone formation, reducing the quantity of VOCs in the Basin has been an on-going priority and effort by the SCAQMD. Because the handling of light liquids at petroleum refineries, chemical plants, oil and gas production fields, natural gas processing plants and pipeline transfer stations can result in leaks of fugitive VOC emissions from valves, fittings, pumps, compressors, pressure relief devices (PRDs), diaphragms, hatches, sight-glasses and meters, components from these industries have been considered by SCAQMD as potential sources where VOC emission reductions could be achieved. Examples of light liquids are gasoline, naphtha, monomers, and light crude oil. To reduce VOC leaks from the light liquid/gas/vapor handling components at these industries, Rule 1173 – Fugitive Emissions of Volatile Organic Compounds, was developed and subsequently adopted on July 7, 1989.

Rule 1173 has been amended three times, on December 7, 1990, on May 13, 1994, and on December 6, 2002. The amendments in 1990 focused on SCAQMD approval for changes in major component identification and changes to operator inspection requirements for exempt unmanned pipeline transfer stations. The amendments in 1994 focused on correcting deficiencies, identified by the California Air Resources Board (CARB), that required specific corrections relating to inaccessible components, Executive Officer approval of equivalent test methods; and exemption of unsafe components, in order for the rule to be approved and incorporated into the 1994 State Implementation Plan (SIP). The amendments in 2002 added requirements to achieve further reductions of fugitive VOC emissions by requiring a new leak detection and repair (LDAR) program for components handling heavy liquids. Other changes from the amendments in 2002 focused on PRD releases, monitoring and reporting requirements, and corrective actions.

The Governing Board Resolution for the amendments to Rule 1173 in 2002 directed SCAQMD staff to periodically report to the Governing Board Committees about PRD

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).

releases at affected facilities. On April 23, 2004, SCAQMD staff provided the Stationary Source Committee with a summary of the atmospheric PRD releases from process equipment at Rule 1173 affected facilities. Part of this summary was derived from two refineries that reported six releases exceeding 2,000 pounds of VOC per release event during 2003.

Due to concerns about the high frequency as well as high quantity of emission releases in total from PRDs since the amendments in 2002 (i.e., about 89 tons of VOCs in 2003), the Governing Board Members directed SCAQMD staff to amend Rule 1173 again. The purpose of proposed amended Rule (PAR) 1173 is to: 1) achieve additional VOC emission reductions from valves, fittings, pumps, compressors, pressure relief devices (PRDs), diaphragms, hatches, sight-glasses, and meters located at lubricating oil and grease re-refiners and marine terminals; 2) require lubricating oil and grease re-refiners and marine terminals to implement a leak detection and repair program (LDAR) along with monitoring, recordkeeping and reporting, including releases, for atmospheric PRDs; 3) require enhanced monitoring of atmospheric PRDs at refineries; 4) amend the monitoring, recordkeeping and reporting requirements for atmospheric PRDs; and 5) add new definitions for clarity throughout the rule. As a result of the proposed amendments, PAR 1173 is expected to reduce VOC emissions from affected equipment by approximately 800 pounds per day.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PAR 1173 is a “project” as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the project and has prepared this [Final draft](#) 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 [Final Draft](#) 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 [Final Draft](#) EA to address the potential adverse environmental impacts associated with the proposed project. The [Final Draft](#) 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 project would not have a significant adverse effect on the environment. [No comments were received on the Draft EA during the 30-day public review period \(from March 28, 2007 to April 26, 2007\). Prior to making a decision on the proposed amendments, the SCAQMD Governing Board must review and certify that the Final EA complies with CEQA as providing adequate information on the potential adverse environmental impacts of the proposed amended rule.](#) Therefore,

pursuant to CEQA Guidelines §15252, no alternatives or mitigation measures are included in this ~~Final Draft~~ EA. The analysis in Chapter 2 supports the conclusion of no significant adverse environmental impacts.

PROJECT LOCATION

PAR 1173 would affect facilities located throughout the SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of the Riverside County and the SSAB that 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 1173 is to further control fugitive VOC emissions from leaking components at lubricating oil and grease re-refiners and marine terminals by regulating leaks from equipment that handle or process both heavy and light liquids/gas/vapors and releases

from PRDs. Reducing emissions from these sources would help achieve and maintain, with a margin of safety, state and federal ambient air quality standards within SCAQMD's jurisdiction. Specifically, PAR 1173 will further reduce fugitive VOC emissions overall by requiring: 1) lubricating oils and grease re-refiners and marine terminals to implement a leak detection and repair (LDAR) program; 2) refineries with less than 50 atmospheric PRDs to install electronic monitoring devices on those PRDs in two phases by July 1, 2009; 3) refineries with more than 50 atmospheric PRDs to install electronic monitoring devices on those PRDs in three phases by July 1, 2010; 4) refineries and lubricating oil and grease re-refiners to submit new or revised compliance plans, identifying the atmospheric process PRD inventory and the monitoring method option selected; 5) lubricating oil and grease re-refiners to notify the SCAQMD of any atmospheric PRD releases exceeding the reportable quantity limits as stipulated in Title 40 of the Code of Federal Regulations (CFR), Parts 117, 302 and 355 including any atmospheric releases exceeding 100 pounds of VOC; and 6) quarterly monitoring reports for the atmospheric process PRDs.

PROJECT BACKGROUND

Petroleum refineries, chemical plants, oil and gas production sites, natural gas processing plants, and pipeline transfer stations are all regulated by Rule 1173. Sources of fugitive VOC emissions at these facilities are from process and transfer areas that contain a wide variety of VOC-containing products and chemicals. Generally, any processes or transfer areas where leaks can occur are sources of fugitive VOC emissions. These components include, but are not limited to, valves, connectors (i.e., flanged, screwed, welded or other joined fittings), pumps, compressors, PRDs, diaphragms, hatches, sight-glasses, stuffing-boxes, agitator seals, and meters.

Overview of Current Regulatory Requirements

There are three levels of regulatory control requirements that apply to fugitive VOC emissions in Rule 1173: 1) local (i.e., SCAQMD); 2) state (i.e., California Air Resources Board or CARB); and 3) federal requirements (i.e., Environmental Protection Agency or EPA). The SCAQMD's local efforts to specifically regulate sources of fugitive VOCs from the affected industries have been based partly on implementing measures already adopted by EPA and CARB. The following is an overview of the SCAQMD rules that have been adopted to implement federal, state, or SCAQMD fugitive VOC reduction programs.

SCAQMD Requirements

For facilities that are subject to Rule 1173, there are four other related local rules for reducing fugitive VOC emissions from specific activities that may also apply: Rule 462 – Organic Liquid Loading, Rule 463 – Organic Liquid Storage, Rule 1176 – Sumps and Wastewater Separators, and Rule 1178 – Further Reduction of VOC Emissions from Storage Tanks at Petroleum Refineries.

Rule 462 regulates VOC emissions from facilities that load organic liquids into any tank truck, trailer or railroad tank car by requiring vapor recovery and/or a disposal system for displaced organic vapors. In addition, Rule 462 has an operator leak inspection program for VOC vapor and liquid leaks from affected components. Rule 463 applies to aboveground stationary tanks used for storage of organic liquid and aboveground tanks used for storage of

gasoline. Rule 463 regulates VOC emissions by requiring tanks to be pressurized or designed and equipped with a vapor control device such as external floating roofs, fixed roofs with an internal floating-type cover or a vapor recovery system. Rule 1176 regulates VOC emissions from components of wastewater systems at petroleum refineries, on-shore oil production fields, off-shore oil production platforms, chemical plants, and industrial facilities that produce VOC-containing process water such as process drains, sumps, separators, forebays, sewer lines and junction boxes. Rule 1178 regulates VOC emissions from aboveground storage tanks located at petroleum facilities.

State Requirements

The Air Toxics "Hot Spots" Information and Assessment Act was enacted in September 1987 by the California State Assembly as Assembly Bill 2588 (hereafter referred to as the AB2588 program). Under AB2588 program, owners or operators of certain stationary sources are required to report the types and quantities of specified toxic substances, including any styrene, methyl methacrylate (MMA), methylene chloride, toluene, xylene, n-hexane, methyl ethyl ketone (MEK), trichloroethane (TCA), methanol, etc., released into the air. Emissions of interest are those that result from the routine operation of a facility or that are predictable, including but not limited to continuous and intermittent releases and process upsets or leaks. The goals of AB2588 are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, and to notify nearby residents of significant risks. All facilities affected by PAR 1173 are subject to the emissions inventory reporting requirements under the AB2588 program.

Federal Requirements

The federal Clean Air Act (CAA) establishes requirements to regulate emissions of air pollutants to protect human health and the environment. In addition to regulating criteria pollutants and VOCs, the CAA requires the EPA to regulate toxic air contaminants (TACs) that have been found to adversely affect human health. Federal regulations in the CAA include the New Source Performance Standards (NSPS) under §111 and the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) under §112. The EPA periodically promulgates NSPS standards in the CFR, Chapter 40, Part 60 (40 CFR Part 60) and NESHAPs in 40 CFR Parts 61 and 63. The SCAQMD has been delegated authority by EPA to implement and enforce both NSPS and NESHAP requirements. The requirements in 40 CFR Parts 60 and 61 were adopted by reference in SCAQMD Regulations IX and X, respectively.

For fugitive VOC emissions from petroleum refineries, chemical plants, oil and gas production sites, natural gas processing plants, and pipeline transfer stations, three NSPS standards are applicable: 1) 40 CFR Part 60 Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry; 2) 40 CFR Part 60 Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries; and 3) 40 CFR Part 60 Subparts KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. In addition, one NESHAP promulgated as 40 CFR Part 63 Subpart CC, §63.648 - Equipment Leak Standards applies to facilities that would be subject to the requirements of PAR 1173.

Products containing VOCs and TACs used by the industries that would be subject to PAR 1173 are also addressed in other federal legislation including but not limited to:

- Occupational Safety and Health Act (OSHA);
- Toxic Substances Control Act (TSCA);
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA);
- Title III of the Superfund Amendments and Reauthorization Act (SARA); and,
- Resource Conservation and Recovery Act (RCRA).

PROJECT DESCRIPTION

Rule 1173 currently applies to VOC leaks from components and releases from PRDs located at refineries, chemical plants, oil and gas production fields, natural gas processing plants and pipeline transfer stations. The purpose of PAR 1173 is to expand the applicability to include facilities engaged in blending, compounding and re-refining lubricating oils and greases and marine terminals, and to further reduce VOC emissions by requiring a leak detection and repair (LDAR) program for these facilities. PAR 1173 will also require enhanced monitoring of atmospheric PRDs located at refineries to more accurately identify and quantify PRD releases. The following summarizes the major changes to the proposed amended rule. A copy of PAR 1173 is included in Appendix A.

Applicability

This subdivision has been modified by ~~replacing the word “refineries” with the more general term “petroleum facilities” so that adding~~ “lubricating oil and grease re-refiners” and “marine terminals” ~~so that these facilities~~ will also be subject to the requirements of PAR 1173.

Definitions

For consistency with the proposed change to the applicability subdivision, new definitions for “lubricating oil and grease re-refiner,” ~~and~~ “marine terminal,” ~~and “petroleum facility”~~ are proposed to be added to PAR 1173. ~~Similarly, the definition of facility is proposed to be modified to include lubricating oil and grease re-refiners and marine terminals.~~

Identification Requirements

~~Since the requirement to submit information that identifies components operating in heavy liquid service has expired in 2003 and is now obsolete, this requirement is proposed to be deleted from PAR 1173.~~

Maintenance Requirements

The obsolete maintenance requirements in Table 2 – Repair Periods that expired June 30, 2003 are proposed to be removed from PAR 1173.

Atmospheric PRD Requirements

This subdivision has been expanded to include atmospheric PRD requirements for ~~petroleum facilities, which includes~~ refineries, lubricating oil and grease re-refiners, and marine terminals. Further, to more accurately identify and quantify releases from atmospheric PRDs

at ~~refineries~~~~petroleum facilities~~, PAR 1173 requires enhanced monitoring of all atmospheric PRDs. The implementation schedule varies depending on the number of atmospheric PRDs at a facility. For example, if a ~~refinery~~~~petroleum facility~~ has less than 50 atmospheric PRDs, the operator shall install tamper-proof electronic valve monitoring devices on ~~all inaccessible PRDs and~~ at least 50 percent of all ~~accessible~~ PRDs by ~~January 1, 2009~~~~July 1, 2008~~, and the remainder by July 1, 2009. However, if a ~~refinery~~~~petroleum facility~~ has more than 50 atmospheric PRDs, then the operator shall install tamper-proof electronic valve monitoring devices on ~~all inaccessible PRDs and~~ at least 20 percent of all ~~accessible~~ PRDs by ~~July 1, 2008~~ ~~January 1, 2009~~, at least 40 percent by July 1, 2009, and the remainder by July 1, 2010. Regardless of the number of atmospheric PRDs, ~~refinery operators of petroleum facilities~~ will be required to use electronic process control instrumentation to conduct real time continuous parametric monitoring in order to demonstrate compliance.

PAR 1173 proposes to require operators of lubricating oil and grease re-refiners and marine terminals to install electronic process control instrumentation to conduct real time continuous parametric monitoring by January 1, 2009 or to install telltale indicators no later than December 31, 2007, if parametric monitoring is not feasible.

The proposed amendments also contain an option that would allow the operator of a ~~petroleum facility~~~~refinery~~ to request additional time, but no later than the next scheduled turnaround of the process unit associated with the atmospheric PRD, to install the electronic monitors, provided that the operator can demonstrate that installing the electronic monitors at an earlier date is not feasible or constitutes a safety hazard.

In the event of a release, this subdivision contains requirements for operators to use electronic monitors to record the duration of each release and to quantify the amount of the compounds released. However, the proposed amendments contain an option that would allow the operator to use a combination of electronic monitoring at the PRD and process control instrumentation, provided that the collective data from these devices can accurately represent the actual process conditions at the location of the PRD as well as record the quantity of emissions, the type of compounds released, and the duration of the release event. To make a distinction between vapor and liquid releases, this subdivision contains a clarification that the PRD requirements do not apply to atmospheric PRDs that release materials in liquid form to drains regulated by Rule 1176 – VOC Emissions from Wastewater Systems.

Finally, the requirement for an operator to submit a compliance plan or revised compliance plan is proposed to be extended until December 31, ~~2007~~ 2008. Other minor changes are proposed for clarity and consistency with the other changes proposed throughout PAR 1173.

Recordkeeping and Reporting Requirements

The recordkeeping and reporting requirements in Rule 1173 currently apply to either a refinery or a chemical plant. To be consistent with expanding the applicability to include lubricating oil and grease re-refiners and marine terminals, the recordkeeping and reporting requirements have been clarified to also apply to lubricating oil and grease re-refiners and marine terminals ~~by replacing the word “refinery” with the term “petroleum facility.”~~

Exemptions

Except for the identification requirements in subdivision (e) ~~and the atmospheric PRD requirements in paragraph (h)(3) for submitting a compliance plan or revised compliance plan by December 31, 2007~~, operators of lubricating oils and grease re-refiners and marine terminals do not have to comply with the requirements in PAR 1173 until December 31, 2007~~January 1, 2008~~.

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 adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Amended Rule (PAR) 1173 – Control of Volatile Organic Compound Leaks and Releases From Components at Petroleum Facilities and Chemical Plants
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Barbara Radlein, (909) 396-2716
PAR 1173 Contact Person:	Ken Ellis, (909) 396-2457
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 purpose of PAR 1173 is to reduce VOC emissions resulting from components and releases from pressure relief devices (PRDs) at petroleum facilities (refineries, lubricating oil and grease re-refiners, and marine terminals,) chemical plants, oil and gas production fields, natural gas processing plants, and pipeline transfer stations. The proposed amendments to Rule 1173 include: 1) requirements for lubricating oil and grease re-refiners and marine terminals to implement a leak detection and repair (LDAR) program; 2) requirements for lubricating oil and grease re-refiners to conduct monitoring, recordkeeping and reporting, including reporting releases from atmospheric PRDs; 3) requirements for enhanced monitoring of atmospheric PRDs at refineries; 4) changes to monitoring, recordkeeping and reporting requirements for atmospheric PRDs; and, 5) adding new definitions. PAR 1173 is expected to reduce approximately 800 pounds per day of VOC emissions from affected equipment.
Surrounding Land Uses and Setting:	Primarily industrial and commercial facilities
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact issues 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 a "✓" 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 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 has been 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: March 23, 2007

Signature: Steve Smith

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

The purpose of PAR 1173 is to: 1) achieve additional VOC emission reductions from valves, fittings, pumps, compressors, PRDs, diaphragms, hatches, sight-glasses, and meters located at lubricating oil and grease re-refiners and marine terminals; and 2) require lubricating oil and grease re-refiners and marine terminals to implement a LDAR program along with monitoring, recordkeeping and reporting, including releases, for atmospheric PRDs; 3) require enhanced monitoring of atmospheric PRDs at refineries; 4) amend the monitoring, recordkeeping and reporting requirements for atmospheric PRDs; and 5) add new definitions for clarity throughout the rule. The effect of implementing the proposed project would reduce VOC emissions from leaking components and releases from atmospheric PRDs at lubricating oil and grease re-refiners and marine terminals. PAR 1173 would also make atmospheric PRD monitoring at refineries more stringent. As a result of the proposed amendments, PAR 1173 is expected to reduce VOC emissions from affected equipment by approximately 800 pounds per day. Note that there are other amendments proposed throughout PAR 1173 for continuity and clarity, but they are not expected to have an effect on emissions and, thus, will not be addressed further in this [Final Draft EA](#).

The expected options for compliance with proposed amendments to the PRD requirements in PAR 1173 would be implementing a LDAR program for ~~petroleum facilities not currently subject to Rule 1173, which includes~~ lubricating oil and grease re-refiners, and marine terminals. For refineries, the LDAR program is already in place for monitoring PRDs but it would be more stringent under PAR 1173 and could continue to potentially involve physical changes to the affected facilities during the repair, replacement or removal of leaking components. This enhanced LDAR program could potentially involve physical changes to the affected facilities during the repair, replacement or removal of leaking components and for PRDs to be connected to electronic valve monitoring devices on the atmospheric process PRD inventory and electronic process control instrumentation for real time continuous parameter monitoring.

For example, if a ~~petroleum facility refinery~~ has less than 50 atmospheric PRDs, the operator shall install tamper-proof electronic valve monitoring devices on ~~all inaccessible PRDs and~~ at least 50 percent of all ~~accessible~~ PRDs by ~~July 1, 2008~~ January 1, 2009, and the remainder by July 1, 2009. However, if a ~~petroleum facility refinery~~ has more than 50 atmospheric PRDs, then the operator shall install tamper-proof electronic valve monitoring devices on ~~all inaccessible PRDs and~~ at least 20 percent of all ~~accessible~~ PRDs by ~~July 1, 2008~~ January 1, 2009, at least 40 percent by July 1, 2009, and the remainder by July 1, 2010. However, if the refinery operator ~~of a petroleum facility~~ can demonstrate that installing the electronic monitors by the applicable compliance date is not feasible or constitutes a safety hazard, the operator will have the opportunity to request additional time to install the monitoring devices, but the installation should occur no later than the next scheduled turnaround of the process unit associated with the atmospheric PRD. Regardless of the number of atmospheric PRDs, refinery operators ~~of petroleum facilities~~ will be required to use electronic process control instrumentation to conduct real time continuous parametric monitoring in order to demonstrate compliance.

In the event of a vapor release⁴, ~~refinery operators of petroleum facilities~~ are required to use electronic monitors to record the duration of each release and to quantify the amount of the compounds released. However, the operator will have the option to use a combination of electronic monitoring at the PRD and process control instrumentation, provided that the collective data from these devices can accurately represent the actual process conditions at the location of the PRD as well as record the quantity of emissions, the type of compounds released, and the duration of the release event.

Thus, answers to the following checklist items are based on the assumption that compliance with PAR 1173 will be achieved by implementing a new LDAR program for lubricating oil and grease re-refiners and marine terminals, an enhanced LDAR program for refineries, and by installing electronic valve monitoring devices or electronic process control instrumentation, or a combination of electronic monitoring at the PRD and process control instrumentation on certain atmospheric PRDs.

	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.

⁴ PRD releases in liquid form to drains are regulated by Rule 1176 – VOC Emissions from Wastewater Systems and, thus, are not covered by Rule 1173.

Discussion

I.a), b), c) & d) Of the proposed amendments, only the requirements to repair, replace or remove leaking components and install electronic valve monitoring devices or electronic process control instrumentation for real time continuous parameter monitoring could cause slight physical changes to an affected facility. In the case of leaking components, repair, replacement or removal activities are not expected to substantially alter the overall physical appearance of an affected facility. Thus, the physical changes anticipated as a result of implementing PAR 1173 would be minor physical changes such as new piping installations at existing industrial facilities, which are typically located in industrial areas devoid of scenic vistas.

Because PAR 1173 affects operations at existing facilities, it would not result in any new construction of buildings or other structures that would obstruct scenic resources or degrade the existing visual character of a site, including but not limited to, trees, rock outcroppings, or historic buildings. Further, 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 [Final Draft](#) 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.

Discussion

II.a), b), & c) Of the proposed amendments, only the requirements to repair, replace or remove leaking components and install electronic valve monitoring devices or electronic process control instrumentation for real time continuous parameter monitoring could cause slight physical changes to an existing affected facility. Any physical changes anticipated as a result of implementing PAR 1173 would occur at existing facilities. However, none of these compliance activities are expected to substantially alter the overall physical appearance of an affected facility. Thus, PAR 1173 would not result in any new construction of buildings or other structures that would convert any classification of farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. Based upon this consideration, significant adverse agricultural resource impacts are not anticipated as a result of implementing PAR 1173.

Based upon these considerations, significant agricultural resource impacts are not anticipated and will not be further analyzed in this [Final Draft](#) 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"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 1173 specifically implements Control Measure #FUG-01 from the Draft 2007 AQMP for improved leak detection and repair. Specifically, PAR 1173 is being implemented to reduce VOC emissions from the affected industries by 1) requiring a new LDAR program for lubricating oil and grease re-refiners and marine terminals; 2) requiring enhanced monitoring of atmospheric PRDs at refineries; and 3) amending the monitoring, recordkeeping and reporting requirements for atmospheric PRDs. Accordingly, the proposed project is expected to significantly contribute to the overall improvement of air quality in the region by reducing VOC emissions up to 800 pounds per day from facilities affected by PAR 1173.

Attainment of the state and federal ambient air quality standards protect sensitive receptors and the public in general from the adverse effects of criteria pollutants which are known to have adverse human health effects. Based on the discussion under items III. b, c) and f), reducing leaks by imposing repair requirements, modifying leak criteria thresholds, and requiring additional monitoring, recordkeeping, to a certain extent, contribute to carrying out the goals of the AQMP to reduce VOC emissions, which in turn, contribute to attaining the state and federal ambient air quality standards. Thus, PAR 1173 will ultimately contribute to attaining and maintaining these standards with a margin of safety.

As noted previously and in the following analysis, PAR 1173 will result in a permanent reduction of VOC emissions. As a result, PAR 1173 will not obstruct implementation of the AQMP. Therefore, the reduction in VOC emissions is a beneficial effect such that it will not be further analyzed in this [Final Draft](#) EA.

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

Air Quality Significance Criteria

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. If impacts exceed any of the criteria in Table 2-1, they will be considered significant. All feasible mitigation measures will be identified and implemented to reduce significant impacts to

the maximum extent feasible. The project will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

Table 2-1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 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)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants ^d		
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 $\mu\text{g}/\text{m}^3$ (construction) ^e & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$ 20 $\mu\text{g}/\text{m}^3$	
PM2.5 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^e & 2.5 $\mu\text{g}/\text{m}^3$ (operation)	
Sulfate 24-hour average	25 $\mu\text{g}/\text{m}^3$	
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 Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

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

^e 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

Summary of Operational Air Quality Impacts

The overall objective of the proposed project is to further reduce VOC emissions from leaking components and releases from atmospheric PRDs at [refineries, lubricating oil and grease re-refiners, and marine terminals](#)~~petroleum facilities~~. As a result of the proposed changes to Rule 1173, additional reductions of VOC emissions will occur. In accordance with the data provided in the following analyses, PAR 1173 is estimated to have a total quantity of projected VOC emission reductions up to 800 pounds per day.

Analysis of the Proposed Rule Modifications on Emissions – Operation Air Quality Impacts

PAR 1173 contains several changes; some will affect emissions while others will not. Of the proposed changes to PAR 1173, the only changes that are expected to reduce day-to-day operational VOC emissions from the affected facilities are:

- Implementing a new LDAR program for monitoring atmospheric PRDS at lubricating oil and grease re-refiners and marine terminals;
- Requiring electronic monitoring devices and electronic process control instrumentation on atmospheric PRDs; and
- Implementing an enhanced PRD monitoring program for refineries.

The following sections will individually address the estimated emission reductions based on the proposed changes to PAR 1173.

LDAR Program for Lubricating Oil and Grease Re-Refiners and Marine Terminals

There are approximately 23,508 components (i.e., valves, pumps, connectors, and other components) representing ~~232~~ 231.8 tons per year of VOC emissions during reporting year 2003-2004 at lubricating oil and grease re-refiners and marine terminals. Requiring the implementation of a LDAR program which requires the monitoring of atmospheric PRDs at these facilities will collectively contribute to potential emission reductions from implementing PAR 1173. The estimated emission reductions for heavy liquid and light liquid valves, pumps and connectors at lubricating oil and grease re-refiners and marine terminals rely on the revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals⁵.

Table 2-2 summarizes the emission inventory and estimated emission reductions for lubricating oil and grease re-refiners and marine terminals. The total estimated emission reductions for valves, pumps, connectors in heavy and light liquid service, and other components in heavy and light liquid service for lubricating oil and grease re-refiners and marine terminals are expected to be approximately 800 pounds per day of VOC. Refer to Appendix B for the equations used and sample calculations of the fugitive VOC emissions after implementing the proposed LDAR requirements in PAR 1173 for lubricating oil and grease re-refiners and marine terminals.

⁵ Table IV-3a, California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, California Air Pollution Control Officers Association (CAPCOA)/CARB, February, 1999.

Table 2-2
Estimated Emissions Inventory & Emission Reductions For Components at
Lubricating Oil and Grease Re-Refiners and Marine Terminals

Component	Inventory	2003-2004 Reported VOC Emissions (tons per day)	Estimated VOC Emissions after LDAR (tons per day)	VOC Emission Reductions (tons per day)	VOC Emission Reductions (pounds per day)
Heavy Liquid Valves	3,041	0.0182	0.00343	0.01477	29.54
Heavy Liquid Pumps	120	0.0662	0.00115	0.06505	130.1
Heavy Liquid Connectors ¹	1,828	0.0194	0.00143	0.01797	35.94
Heavy Liquid Others	5,107	0.0504	0.0145	0.0359	71.8
Light Liquid Valves	3,712	0.3437	0.12909	0.21461	429.22
Light Liquid Pumps	98	0.0686	0.02629	0.04231	84.62
Light Liquid Connectors ²	2,409	0.0182	0.05138	(0) ³	(0) ³
Light Liquid Others	7,193	0.0504	0.39276	(0) ³	(0) ³
TOTAL	23,508	0.6351	0.62003	0.39061	781.22

¹ The number of connectors is assumed to be 25 percent of the total number of components (connectors, sight-glasses, meters, hatches, etc.) reported in the "Other" category of SCAQMD Annual Emissions Reporting (AER) Form R3. The remaining components were placed in the "Others" category.

² The ratio of connectors in heavy liquid to light liquid service was estimated based on the ratio of valves in heavy liquid to light liquid service (HLC/LLC = 2540/3577 = 0.71). In cases where enough information was not provided, components in heavy liquid and light liquid service were equally distributed.

³ Emissions reported were found to be less than the computed LDAR emissions such that a zero default will be used until such time that the calculation methods used by operators of marine terminals can be verified.

Construction Air Quality Impacts

Of the proposed rule changes previously discussed in the "Summary of Operational Air Quality Impacts," only the proposed LDAR program for lubricating oil and grease re-refiners and marine terminals could require some physical changes associated with repairing, replacing or removing a leaking component such as installing new seals, piping, connectors, et cetera. Also, as part of implementing PAR 1173 to comply with the monitoring requirements, minor construction activities associated with the installation of electronic monitoring devices and electronic process

control instrumentation on atmospheric PRDs between the date of adoption and July 1, 2010, depending on the number of atmospheric PRDs on-site, is expected to occur. However, due to the relatively straightforward nature of repairing leaks such as installing a cap on an open-ended line, replacing an existing pump with a sealless type, installing a closed-vent system onto a compressor, or installing a rupture disc and installing electronic monitoring devices, the need for heavy-duty construction equipment, grading, demolition or the construction of new buildings or structure is not anticipated as a result of implementing PAR 1173. Therefore, no increase in daily construction emissions would be expected to occur at any given facility and no additional daily construction air quality impacts are anticipated as a result of implementing the requirement in PAR 1173 to extend the existing LDAR program to include lubricating oil and grease re-refiners and marine terminals. Thus, air quality impacts from construction-related activities associated with implementing PAR 1173 are less than significant.

Conclusion

Based on the previous discussions, the proposed project would not result in significant adverse air quality impacts. In fact, the proposed project is expected to result in an air quality benefit of approximately 800 pounds per day of VOC emission reductions. Further, PAR 1173-affected facilities will be required to continue to comply with all other relevant SCAQMD rules and regulations, which may include any or all of the following: source specific rules (Regulation XI); prohibitory rules (Regulation IV); toxic rules (Regulation XIV); New Source Review (Regulation XIII); and Title V (Regulation XXX). As such, the proposal would not diminish an existing air quality rule or future compliance requirement, nor conflict with or obstruct implementation of the applicable air quality plan. 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. Since air quality impacts from implementing PAR 1173 do not exceed any air quality significance thresholds (Table 2-1) pursuant to CEQA Guidelines §15130(a)(3), 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 a cumulatively considerable net increase of any criteria pollutant.

III.d) Affected facilities are not expected to expose sensitive receptors to substantial pollutant concentrations from the implementation of PAR 1173 for the following reasons: 1) the affected facilities are existing facilities located in industrial or commercial areas; 2) there are no operational increases of VOC associated with the proposed changes; 3) there are no heavy-duty diesel construction equipment emissions associated with PAR 1173; and 4) the change in VOC emissions is a reduction of approximately 800 pounds per day. Therefore, significant adverse air quality impacts to sensitive receptors are not expected from implementing PAR 1173.

III.e) Most of the existing affected facilities are located in industrial and commercial areas, but some residential areas are located in the vicinity of some of the [petroleum-affected](#) facilities. Historically, the SCAQMD has enforced odor nuisance complaints through SCAQMD Rule 402 - Nuisance. The proposed requirements in PAR 1173 are expected to reduce VOC emissions which can potentially reduce odors from affected facilities, especially in those that have residences located nearby. PAR 1173 will not require affected facilities to modify their existing operations using heavy-duty diesel construction equipment and, thus, is not expected to create

objectionable odors affecting a substantial number of people. Therefore, no significant adverse odor impacts are expected to result from implementing the proposed amendments.

	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) The proposed project does not require the acquisition of land to comply with the provisions of PAR 1173. Further, PAR 1173 would only affect equipment or processes located within the boundaries of existing facilities in industrial or commercial areas, which have already been greatly disturbed. Examples of physical modifications to existing components at existing facilities from implementing PAR 1173 include leak repair activities such as installing a cap on an open-ended line, replacing an existing pump with a sealless type, installing a closed-vent system onto a compressor, or installing a rupture disc, as well as adding electronic meters. In general, these areas currently do not typically support riparian habitat, federally protected wetlands as defined by §404 of the Clean Water Act, or migratory corridors. Industrial or commercial facilities that would be affected by PAR 1173 are often devoid of landscaping or other plant species for fire safety reasons. Additionally, special status plants, animals, or natural communities 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 are not expected to be found in close proximity to the affected facilities.

IV.e) & f) PAR 1173 is not envisioned to conflict with local policies or ordinances protecting biological resources nor local, regional, or state conservation plans because it will only affect existing petroleum or chemical processing facilities located in industrial or commercial areas. Effects outside the boundaries of affected facilities are not anticipated. Additionally, PAR 1173 will not conflict with any adopted 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 will 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. Further, in accordance with this conclusion, the SCAQMD believes that this proposed project qualifies for the no effect determination pursuant to Fish and Game Code §711.4 (c).

Based upon these considerations, significant adverse biological resources impacts are not anticipated and will not be further analyzed in this ~~Final Draft~~ 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 type="checkbox"/>	<input checked="" 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.

Discussion

V.a), b), c), & d) Since construction-related activities associated with the implementation of PAR 1173 are expected to be minor, no impacts to historical resources will occur as a result of this project. PAR 1173 is not expected to require physical changes to the environment, which may disturb paleontological or archaeological resources. Furthermore, it is envisioned that the areas where the affected facilities exist are already either devoid of significant cultural resources or whose cultural resources have been previously disturbed.

Based on the historical uses of the affected sites being at existing industrial and commercial facilities and that the minor construction activities that would result from implementing PAR

1173 will not include subsurface activities that would disturb soil, the likelihood of encountering cultural resources is low. For this reason, the discovery of human remains relative to the proposed project is not anticipated and unlikely. However, if human remains are unearthed, construction activities are required to cease until the County Coroner has made the necessary findings with respect to origin and disposition, as required by Public Resources Code §5097.98-99 and Health and Safety Code §7050.5 in order to prevent further disturbance of the affected area. Further, if the remains are determined to be of Native American origin, all relevant procedures identified in CEQA Guidelines §15064.5 (e)(1)(B) will be followed.

It should be noted, however, that in general, construction activities include standard procedures if any cultural or archaeological resources are accidentally encountered. In addition, Public Resources Code §21083.2 identifies “reasonable efforts” to preserve archaeological resources or mitigation measures to reduce impacts to archaeological resources. Further, compliance with all local, state and federal regulations (and notifications) will occur in the event of an accidental discovery of any cultural or historic resources.

Based upon these considerations, significant adverse cultural resources impacts are not expected from implementing PAR 1173 and will not be further assessed in this ~~Final Draft~~-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) & e) The primary effect of implementing PAR 1173 is that VOC emissions from affected equipment will be reduced by maintaining components and repairing, removing, or replacing leaking components as appropriate and installing electronic valve monitoring devices or electronic process control instrumentation, which are not energy intensive devices. Further, the physical changes anticipated as a result of implementing PAR 1173 would be minor physical changes such as new piping installations that would be expected to create little or no increased demand for energy at affected facilities. Further, the repaired, replaced or removed equipment that would be utilized to comply with the proposed leak detection and repair requirements are not expected to create or represent an additional demand for energy at affected facilities because heavy-duty construction equipment are not required for the installation of monitoring devices. To the extent that VOC emissions are recovered and returned to the original product, small energy conservation benefits would accrue.

As a result, PAR 1173 would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner, or result in the need for new or substantially altered power or natural gas systems. Since PAR 1173 would affect existing facilities, it will not conflict with adopted energy conservation plans. Additionally, affected facilities would be expected to comply with existing energy conservation plans and standards as a business strategy to minimize operating costs. Accordingly these impact issues will not be further analyzed in the [Final Draft EA](#).

VI.b), c), & d) In light of the previous discussion and since it would affect existing facilities, PAR 1173 would not create any significant adverse effects on peak and base period demands for electricity and other forms of energy and it is not expected to affect an operator's ability to comply with existing energy standards. Finally, minor increased energy demand to operate monitoring equipment is not considered to be a wasteful use of energy.

Based on the preceding discussion, PAR 1173 would not create any significant effects on peak and base period demands for electricity and other forms of energy and it is expected to comply with existing energy standards. Therefore, PAR 1173 is not expected to generate significant adverse energy resources impacts and will not be discussed further in this [Final Draft 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"/>
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) 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 will be required to conform, as necessary, with the Uniform Building Code and all other applicable state codes. Further, new buildings are not anticipated as a result of implementing PAR 1173. As a result, substantial exposure of people or structure to the risk of loss, injury, or death involving seismic-related activities, including landslides, is not anticipated and will not be further analyzed in this [Final Draft EA](#).

VII.b) PAR 1173 will further regulate leaks from affected components and releases from atmospheric PRDs, which occur at existing industrial or commercial facilities. Since the primary effects of PAR 1173 are to inspect for leaks and repair, remove or replace leaking components and to install electronic valve monitoring devices or electronic process control instrumentation, no soil disruption from excavation, grading, or filling activities; changes in topography or surface relief features; erosion of beach sand; or changes in existing siltation rates are anticipated from the implementation of PAR 1173. Minor construction activities could result from repair activities, but construction activities are not expected to include site preparation or other ground disturbing activities. In the event some minor site preparation activities are necessary, operators would be required to implement Rule 403 dust control measures, which would be expected to limit any topsoil erosion that could occur.

VII.c) Since PAR 1173 will affect existing lubricating oil and gas re-refiners and will continue to affect existing refineries, chemical plants, oil and gas production fields, natural gas processing

plants, and pipeline transfer stations, it is expected that the existing soil types present at the affected facilities will not be further susceptible to expansion or liquefaction. Furthermore, subsidence is not anticipated to be a problem since little or no excavation, grading, or filling activities will occur at affected facilities. Further, the proposed project does not involve or increase drilling or removal of underground products (e.g., water, crude oil, et cetera) that could produce subsidence effects. Additionally, the affected areas are not envisioned to be prone to landslides or have unique geologic features since the affected facilities are located in industrial or commercial areas where such features have already been altered or removed.

VII.d) & e) Since the proposed project will affect existing facilities, it is expected that people or property will not be exposed to expansive soils or soils incapable of supporting water disposal beyond what may currently be the case. Further, the proposed project does not involve installation of septic tanks or other alternative waste water disposal systems. The main effect of the proposed project will be the detection of leaks and the repair, removal or replacement of leaking components and the installation of electronic valve monitoring devices or electronic process control instrumentation at the affected facilities.

Based upon these considerations, significant geology and soils impacts are not expected from the implementation of PAR 1173 and will not be further analyzed in this ~~Final Draft~~ EA. Since no significant geology and soils impacts were identified, 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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"/>
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.

Discussion

VIII.a) Although some types of affect facilities transport, store, use, and generate hazardous materials, there would be no change in existing operations at affected facilities and there are no provisions in the proposed amended rule that would increase the total amount of hazardous materials currently transported, stored, used, or generated by the affected facilities. Therefore, implementation of PAR 1173 is not expected to increase any existing hazard that may result from the routine transport, use, or disposal of hazardous materials or that may lead to a reasonably foreseeable accident involving the release of hazardous materials into the environment.

VIII.b) & i) Since PAR 1173 affects facilities located in existing industrial or commercial areas but will not affect current operations nor cause an increase in the storage or use of flammable and otherwise hazardous materials, an increase in the probability of an accidental release into the environment or an increase in existing fire hazards at affected facilities is unlikely. Further, existing emergency planning adequately minimizes the current hazard risks at the affected facilities and provides procedures to respond to hazard risks. Local fire departments ensure that adequate permit conditions are in place to protect against potential risk of upset hazards. Implementation of PAR 1173 will not affect these permit conditions.

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 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, these regulations provide comprehensive measures to reduce hazards, if any, 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 that the potential for explosions or accidental releases of hazardous materials will remain unaffected by the implementation of PAR 1173.

VIII.c), e), & f) In general, the purpose of PAR 1173 is to achieve VOC emission reductions by minimizing component leaks at affected facilities, which will ultimately improve air quality and reduce adverse human health impact related to poor air quality. Since the component leaks occur at existing facilities located in industrial or commercial areas, implementation of PAR 1173 is not expected to increase or create any new hazardous emissions which would adversely affect existing/proposed schools or public/private airports located in close proximity to the affected facilities. In fact, some VOC constituents, such as benzene, are considered to be toxic air

contaminants. Further controlling fugitive VOC emissions would also reduce emissions of some toxic air contaminants. Accordingly, these impact issues are not considered to be significant.

VIII.d) Even if some affected facilities are included on a list of hazardous materials sites pursuant to Government Code §65962.5 as a large quantity generator of hazardous waste, it is not anticipated that complying with PAR 1173 will alter in any way how affected facilities manage their hazardous wastes. It is expected that hazardous materials at affected facilities will continue to be managed in accordance with all applicable federal, state, and local rules and regulations regardless of complying with PAR 1173.

VIII.g) The proposed amended rule has no provisions that would increase the use of any specific material that would be a source of VOC emissions or hazardous materials. In response to finding leaks, owners or operators of regulated facilities have the flexibility of choosing the best approach for modifying components to prevent future leaks. Further, it is likely that facility operators would choose a repair approach that does not pose a substantial safety hazard. Thus, it is not anticipated that PAR 1173 would impair implementation of or physically interfere with an adopted or modified emergency response plan or emergency evacuation plan.

In addition, 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:

- Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
- Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
- Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
- Procedures to notify the necessary persons who can respond to an emergency within the facility;
- Details of evacuation plans and procedures;
- Descriptions of the emergency equipment available in the facility;
- Identification of local emergency medical assistance; and
- Training (initial and refresher) programs for employees in:
 1. The safe handling of hazardous materials used by the business;
 2. Methods of working with the local public emergency response agencies;
 3. The use of emergency response resources under control of the handler;
 4. 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. PAR 1173 will not alter in any way an affected facility's ability to comply with emergency response regulations or ordinances.

VIII.h) Since the component modifications will occur at affected facilities located on existing industrial or commercial sites in urban areas where wildlands are not prevalent, risk of loss or injury associated with wildland fires is not expected. Accordingly, this impact issue is not further evaluated in this [Final Draft EA](#).

Based upon these considerations, significant hazards and hazardous materials impacts are not expected from the implementation of PAR 1173 and will not be further analyzed in this [Final Draft EA](#). Since no significant hazards and hazardous materials impacts were identified, no mitigation measures are necessary or required.

	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, in a manner that would result in substantial erosion or siltation on- or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
d) 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"/>
e) 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"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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"/>
h) 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"/>
i) 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"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l) 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"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
m) 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"/>
n) 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"/>
o) 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

The current Rule 1173 and the proposed requirements in PAR 1173 have little or no effect on existing hydrology or water quality because technologies used to comply with Rule 1173 do not typically use water as part of the air pollution control process or are not water intensive technologies. Since the changes proposed in PAR 1173 would merely establish criteria for determining a leak of VOC emissions and requirements for repairing leaking components at petroleum facilities-refineries, lubricating oil and grease re-refiners, and marine terminals, and do not increase demand for water supplies or generation of wastewater, no additional potential to adversely affect hydrology or water quality is expected. Further, PAR 1173 will not change existing operations at affected facilities such that additional wastewater would be generated or adverse water quality impacts would be caused.

PAR 1173 has no provision that would require the construction of additional water resource facilities, the need for new or expanded water entitlements, or an alteration of drainage patterns. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. PAR 1173 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems at affected facilities or provide substantial additional sources of polluted runoff.

There are no provisions in PAR 1173 that would require an increase in the amount of materials used by the affected industries. Consequently, there would be no change in the composition or volume of existing wastewater streams from the affected facilities. In addition, since complying with the proposed amended rule does not increase water demand or generation of wastewater, it is not expected to require additional wastewater disposal capacity, violate any water quality standard or wastewater discharge requirements, or otherwise substantially degrade water quality.

IX.a), f), k), l), & o) Complying with the proposed project will not change existing operations at affected facilities, nor would it result in generation of increased volumes of wastewater. As a result, there are no potential changes in wastewater volume or composition expected from facilities complying with the requirements in PAR 1173. Further, PAR 1173 is not expected to cause affected facilities to violate any water quality standard or wastewater discharge requirements since wastewater volumes associated with PAR 1173 will remain unchanged. PAR 1173 is not expected to have significant adverse water demand or water quality impacts for the following reasons:

- The proposed project does not increase demand for water by more than 5,000,000 gallons per day.
- The proposed project does not require construction of new water conveyance infrastructure.
- The proposed project does not create a substantial increase in mass inflow of effluents to public wastewater treatment facilities.
- The proposed project does not result in a substantial degradation of surface water or groundwater quality.

- The proposed project does not result in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The proposed project does not result in alterations to the course or flow of floodwaters.

IX.b) & n) Since the proposed project would merely establish leak detection and repair requirements which does not require water for any purpose, no additional demand on the existing water supplies is expected. Therefore, the proposed amendments to PAR 1173 would not change the existing water demand at affected facilities, affect 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. In addition, implementation of PAR 1173 will not increase demand for water from existing entitlements and resources, and will not require new or expanded entitlements. Therefore, no water demand impacts are expected as the result of implementing the proposed amendments.

IX.c), d), & e) Implementation of PAR 1173 will occur at existing facilities whose current operations are typically located in industrial or commercial areas that are paved and the drainage infrastructures are already in place. Since the proposed project would only involve minor construction activities in response to installing electronic monitoring devices, no new increases or changes to storm water runoff, drainage patterns, groundwater characteristics, or flow are expected. Therefore, significant adverse drainage pattern or runoff impacts are not expected as a result of implementing PAR 1173.

IX.g), h), i), & j) The proposed project is not expected to result in the construction of new housing or contribute to the construction of new building structures because any facility modifications or changes are expected to occur at existing facilities as a result of implementing PAR 1173. Therefore, PAR 1173 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 1173 is not expected to expose people or structures to significant new flooding risks. Finally, PAR 1173 will not affect in any way any potential flood hazards inundation by seiche, tsunami, or mud flow that may already exist relative to existing facilities.

IX.m) PAR 1173 will not increase storm water discharge, since no construction activities associated with storm water drains are expected at affected facilities. Similarly, the proposed project will not require any areas at affected facilities to be paved that might affect storm water run-off infrastructure. Therefore, no new storm water discharge treatment facilities or modifications to existing facilities will be required due to the implementation of PAR 1173. Accordingly, PAR 1173 is not expected to generate significant adverse impacts relative to construction of new storm water drainage facilities.

Based upon these considerations, significant hydrology and water quality impacts are not expected from the implementation of PAR 1173 and will not be further analyzed in this [Final Draft](#) 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) Since PAR 1173 would affect existing facilities and any modifications would occur entirely within the boundaries of affected facilities, it will not result in physically dividing an established community.

X.b) There are no provisions in PAR 1173 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 will be altered by regulating VOC emissions from leaking components or releases from atmospheric PRDs at existing affected facilities.

X.c) Since PAR 1173 would further regulate VOC emissions from the affected facilities, PAR 1173 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 implementing the proposed amended rule.

Based upon these considerations, significant land use and planning impacts are not expected from the implementation of PAR 1173 and will not be further analyzed in this [Final Draft-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 1173 that would result in the loss of, or 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. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum that are commonly used for construction activities. The expected options for compliance that could potentially involve physical changes to the affected facilities are the requirements to repair, replace or remove leaking components as well as install electronic valve monitoring devices or electronic process control instrumentation. As a result, only minimal construction activities would be involved. Therefore, no new demand on mineral resources is expected to occur and significant adverse mineral resources impacts from implementing PAR 1173 are not anticipated.

Based upon these considerations, significant mineral resources impacts are not expected from the implementation of PAR 1173 and will not be further analyzed in this [Final Draft](#)-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"/>
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), b), c), & d) Modifications or changes associated with the implementation of PAR 1173 will take place at existing facilities that are located in commercial and industrial settings. The existing noise environment at each of the affected refineries is dominated by heavy equipment, vehicular traffic around the facilities, and trucks entering and exiting the facility properties. Construction activities for the proposed project would be minimal consisting of repairing, replacing or removing leaking components. It is expected that repair or replacement work would not require noise intensive heavy-duty construction equipment, but could be performed by using light-duty equipment or manually. Thus, the proposed project is not expected to produce noise in excess of current operations at each of the affected facilities and the day to day operations associated with complying with PAR 1173 are not expected to add new sources of noise or vibration to any affected facility. It is expected that each facility affected by PAR 1173 will comply with all existing noise control laws or ordinances. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health. Any potential noise or vibration increases associated with construction activities are expected to be less than significant and, thus, noise and vibration impacts will not be further evaluated in the [Final Draft](#)-EA.

XII.e) & f) Implementation of PAR 1173 would consist of improvements within existing facilities. Even if an affected facility is located near a public/private airport, there are no new or excessive noise impacts expected from any of the affected facilities associated with complying with PAR 1173. Thus, PAR 1173 is not expected to expose people residing or working in the project vicinities to excessive noise levels.

Based upon these considerations, significant noise impacts are not expected from the implementation of PAR 1173 and are not further evaluated in this [Final Draft](#)-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"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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 adverse effects, either direct or indirect, on the district's population or population distribution as no additional workers are anticipated to be required at affected facilities to comply with the proposed amendments. For the minor construction activities necessary to comply with PAR 1173 regarding repairing leaks and installing electronic monitoring devices, it is anticipated that construction workers can be drawn from the existing local labor pool. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 1173. As such, PAR 1173 will not result in changes in population densities or induce significant growth in population.

XIII.b) & c) Because the proposed project affects existing industrial and commercial facilities, PAR 1173 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 housing elsewhere in the district.

Based upon these considerations, significant population and housing impacts are not expected from the implementation of PAR 1173 and are not further evaluated in this [Final Draft](#)-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) As a result of implementing PAR 1173, operators at affected facilities will likely be more attentive to their LDAR programs and, thus, more proactive and responsive to locating and repairing leaking components. Thus, the number of leaking components at any one time is expected to be reduced, whereby fugitive VOC emissions and the chances for fires and explosions will be reduced. For these reasons, additional inspections at affected facilities by city building departments or local fire departments are not expected. Since PAR 1173 does not increase the transport, storage, use, or generation of hazardous materials, there is no potential for an increase in the probability of an accidental release of hazardous materials that would require emergency response by local city or county hazmat personnel, fire departments, or police departments.

XIV.c) & d) The local labor pool (e.g., workforce) at affected facilities is expected to remain the same since PAR 1173 would not trigger any changes to current production requirements at the affected facilities and any construction workers needed for construction projects could be drawn

from the locally available workforce. Therefore, with no increase in local population anticipated, construction of new or additional demands on existing schools and parks are not anticipated. Therefore, no significant adverse impacts are expected to local schools or parks.

XIV.e) The proposed project will result in reducing VOC emissions from leaking components and atmospheric PRDs. Besides permitting the equipment or altering permit conditions for component modifications, there is no other need for other types of government services than already address in the previous items. The proposed project 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, therefore, no need for physically altered government facilities.

Based upon these considerations, significant public services impacts are not expected from the implementation of PAR 1173 and are not further evaluated in this [Final Draft](#)-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 effects existing recreational opportunities.

Discussion

XV.a) & b) As previously discussed under “Land Use and Planning,” there are no provisions in the PAR 1173 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 will be altered by the changes proposed in PAR 1173. In addition, since the proposed project is not expected to induce population growth in the district, 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.

Based upon these considerations, significant recreation impacts are not expected from the implementation of PAR 1173 and are not further evaluated in this ~~Final Draft~~ 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) & b) The non-administrative portions of the proposed amendments to PAR 1173 could involve modifications to leaking components. A modification can mean repair, replacement or removal of a component as appropriate. Examples of component modifications include installing a cap on an open-ended line, replacing an existing pump with a sealless type, installing a closed-vent system onto a compressor, or installing a rupture disc. If a component is replaced or removed, it would typically need to be disposed of as solid waste. Some components, especially metal components, would likely be recycled as scrap metal, since they have economic value.

It is important to note that the component modifications that could result from implementing the requirements in PAR 1173 will occur on an “as needed” basis such that the generation of solid waste is expected to be minimal and intermittent. Further, prior to the proposed requirements of PAR 1173, affected facilities have been maintaining their equipment and components and making repairs as necessary. It is in the economic interests of an affected facility to repair leaks

expeditiously because leaks represent a loss of product. Therefore, implementation of PAR 1173 is not seen as a substantial change to the existing setting for component modifications at affected facilities and, as a result, there are no significant adverse solid and hazardous waste impacts associated with the proposed amendments. Consequently, no significant increase in the amount or character of solid or hazardous waste streams is expected to occur. PAR 1173 is not expected to increase the volume of solid or hazardous wastes generated from affected facilities, require additional waste disposal capacity, or result in a facility violating applicable local, state, or federal solid or hazardous waste regulations.

Based on these considerations, PAR 1173 is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity. Further, implementing PAR 1173 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"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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) Since PAR 1173 focuses on reducing VOC emissions from leaking components and atmospheric PRDs, the proposed amendments would have no affect on existing operations at affected facilities that would change or cause additional transportation demands or services. Therefore, since no additional operational-related trips are anticipated, the implementation of PAR 1173 is not expected to significantly adversely affect, either individually or cumulatively, circulation patterns on local roadways or the level of service at intersections near affected facilities.

XVII.c) PAR 1173 will affect existing operations at affected facilities. The height and appearance of the existing structures at these facilities is not expected to change and therefore, implementation of PAR 1173 is not expected to adversely affect air traffic patterns. Further, PAR 1173 will not affect in any way air traffic in the region.

XVII.d) PAR 1173 will involve existing operations at affected facilities such that no offsite modifications to roadways are anticipated for the proposed project that would result in an additional design hazards or incompatible uses.

XVII.e) PAR 1173 will involve existing operations at affected facilities with no changes expected to emergency access at or in the vicinity of the affected facilities. Therefore, the proposed project is not expected to adversely affect emergency access.

XVII.f) PAR 1173 will involve existing operations at affected facilities with no changes expected to the parking capacity at or in the vicinity of the affected facilities. As previously noted, PAR 1173 is not expected to increase demand for additional employees at affected facilities. Therefore, the proposed project is not expected to adversely impact on- or off-site parking capacity.

XVII.g) PAR 1173 will involve existing operations at affected facilities with minor or no facility modifications or changes expected. The implementation of PAR 1173 will not result in conflicts with any policies, plans, or programs related to alternative transportation, such as bus turnouts, bicycle racks, et cetera.

Based upon these considerations, PAR 1173 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"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>

XVIII.a) As discussed in the “Biological Resources” section, PAR 1173 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the affected components and atmospheric PRDs are located entirely within the boundaries of existing facilities in industrial or commercial areas which have already been greatly disturbed and that currently do not support such habitats. Additionally, special status plants, animals, or natural communities are not expected to be found within close proximity to the facilities affected by PAR 1173.

XVIII.b) Based on the foregoing analyses, since PAR 1173 will not result in significant adverse project-specific environmental impacts, it is not expected to cause cumulative impacts in conjunction with other projects that may occur concurrently with or subsequent to the proposed project. Furthermore, potential adverse impacts from implementing PAR 1173 will not be "cumulatively considerable" because there are no, or only minor incremental impacts and there will be no contribution to a significant cumulative impact caused by other projects that would exist in absence of the proposed project. Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by the proposed project.

XVIII.c) Based on the foregoing analyses, PAR 1173 is not expected to cause adverse effects on human beings. Significant adverse air quality, energy, hazards and hazardous materials, hydrology and water quality, solid/hazardous waste, and transportation/traffic are not expected from the implementation of PAR 1173. The direct impact from the proposed project, however, is approximately 800 pounds per day of reduced VOC emissions from the atmosphere. Reducing VOC emissions, a precursor to ozone, is expected to positively affect human health by reducing population exposure to ozone in the district. No impacts to aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, land use/planning, mineral resources, noise, population and housing, public services, and recreation are expected as a result of the implementation of PAR 1173.

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

APPENDIX A

PROPOSED AMENDED RULE 1173

In order to save space and avoid repetition, please refer to the latest version of proposed amended Rule 1173 located elsewhere in the rule amendment package.

The version “PAR 3-22-07” of the proposed amended rule was circulated with the Draft Environmental Assessment that was released on March 28, 2007 for a 30-day public review and comment period ending April 26, 2007.

Original hard copies of the Draft Environmental Assessment, which include the version “PAR 3-22-07” of the proposed amended rule, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B

FUGITIVE VOC EMISSION CALCULATIONS AFTER LDAR

Sample Fugitive VOC Emission Calculations After Implementing LDAR

Assumptions: In general, the current leak thresholds in Rule 1173 is 100 ppm for all components including valves and connectors and other components in heavy liquid service, and 50 ppm for pumps in heavy liquid service. Similarly, all light liquid and gas/vapor phase components have a current leak threshold of 10,000 ppm.

Based on a data from refineries implementing an LDAR program for heavy and light liquid components, the following assumptions are made based on taking 50 percent of the leak thresholds for each type of component:

- valves and connectors in heavy liquid service will average 50 ppm;
- pumps in heavy liquid service will average 25 ppm;
- other components in heavy liquid service will average 50 ppm;
- light liquid and gas/vapor phase components will average 5,000 ppm; and,
- other components in light liquid service will average 5,000 ppm.

The equations are derived from Table IV-3a, California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB, February, 1999.

Fugitive VOC Emissions after LDAR

1) Valves with a Heavy Liquids leak threshold of 50 ppm average:

Fugitive VOC Emissions_{valves} (lb/hr) =

$$\begin{aligned} & \text{Valve Inventory} \times [5 \times 10^{(-6)} \times (\text{Screening Value})^{0.747} \text{ lb/hr}] \times 24 \text{ hr/day} \times 1 \text{ ton}/2000 \text{ lb} \\ & = 3,041 \times [5 \times 10^{-6} \times (50)^{0.747}] \text{ lb/hr} \times 24 \text{ hr/day} \times 1 \text{ ton}/2000 \text{ lb} = \underline{0.0034 \text{ ton per day}} \end{aligned}$$

2) Pumps with a Heavy Liquids leak threshold of 25 ppm average:

Fugitive VOC Emissions_{pumps} (lb/hr) =

$$\begin{aligned} & \text{Pumps Inventory} \times [1.12 \times 10^{(-4)} \times (\text{Screening Value})^{0.622} \text{ lb/hr}] \times 24 \text{ hr/day} \times 1 \\ & \text{ton}/2000 \text{ lb} \\ & = 120 \times [1.12 \times 10^{-4} \times (25)^{0.622}] \text{ lb/hr} \times 24 \text{ hr/day} \times 1 \text{ ton}/2000 \text{ lb} = \underline{0.0012 \text{ ton per day}} \end{aligned}$$

3) Connectors with a Heavy Liquids leak threshold of 50 ppm average:

Fugitive VOC Emissions_{conn.} (lb/hr) =

$$\begin{aligned} & \text{Connectors Inventory} \times [3.37 \times 10^{(-6)} \times (\text{Screening Value})^{0.736} \text{ lb/hr}] \times 24 \text{ hr/day} \times \\ & 1 \text{ ton}/2000 \text{ lb} \\ & = 1,828 \times [3.37 \times 10^{-6} \times (50)^{0.736}] \text{ lb/hr} \times 24 \text{ hr/day} \times 1 \text{ ton}/2000 \text{ lb} = \underline{0.0014 \text{ ton per day}} \end{aligned}$$

4) Other Components with a Heavy Liquids leak threshold of 50 ppm average:Fugitive VOC Emissions_{other} (lb/hr) =Connectors Inventory x [1.92 x 10⁽⁻⁵⁾ x (Screening Value)^{0.642} lb/hr] x 24 hr/day x
1 ton/2000 lb= 5,107 x [1.92 x 10⁻⁵ x (50)^{0.642}] lb/hr x 24 hr/day x 1 ton/2000 lb = 0.0145 ton per day**5) Valves with a Light Liquids leak threshold of 5,000 ppm average:**Fugitive VOC Emissions_{valves} (lb/hr) =Valve Inventory x [5 x 10⁽⁻⁶⁾ x (Screening Value)^{0.747} lb/hr] x 24 hr/day x 1 ton/2000 lb= 3,712 x [5 x 10⁻⁶ x (5,000)^{0.747}] lb/hr x 24 hr/day x 1 ton/2000 lb = 0.129 ton per day**6) Pumps with a Light Liquids leak threshold of 5,000 ppm average:**Fugitive VOC Emissions_{pumps} (lb/hr) =Pumps Inventory x [1.12 x 10⁽⁻⁴⁾ x (Screening Value)^{0.622} lb/hr] x 24 hr/day x
1 ton/2000 lb= 98 x [1.12 x 10⁻⁴ x (5,000)^{0.622}] lb/hr x 24 hr/day x 1 ton/2000 lb
= 0.0263 ton per day**7) Connectors with a Light Liquids leak threshold of 5,000 ppm average:**Fugitive VOC Emissions_{conn.} (lb/hr) =Connectors Inventory x [3.37 x 10⁽⁻⁶⁾ x (Screening Value)^{0.736} lb/hr] x 24 hr/day x
1 ton/2000 lb= 2,409 x [3.37 x 10⁻⁶ x (5,000)^{0.736}] lb/hr x 24 hr/day x 1 ton/2000 lb
= 0.0514 ton per day**8) Other Components with a Light Liquids leak threshold of 5,000 ppm average:**Fugitive VOC Emissions_{other} (lb/hr) =Connectors Inventory x [1.92 x 10⁽⁻⁵⁾ x (Screening Value)^{0.642} lb/hr] x 24 hr/day x
1 ton/2000 lb= 7,193 x [1.92 x 10⁻⁵ x (5,000)^{0.642}] lb/hr x 24 hr/day x 1 ton/2000 lb
= 0.393 ton per day