

APPENDIX B

**NOTICE OF PREPARATION/INITIAL STUDY FOR
PROPOSED RULES 3501 AND 3502**



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

SUBJECT: NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL ASSESSMENT

PROJECT TITLE: PROPOSED RULES 3501 - RECORDKEEPING FOR LOCOMOTIVE IDLING AND 3502 - MINIMIZATION OF EMISSIONS FROM LOCOMOTIVE IDLING

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this Notice of Preparation (NOP) and Initial Study (IS). This NOP/IS serves two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Program Environmental Assessment (PEA) to further assess potential environmental impacts that may result from implementing the proposed project.

This letter, NOP and the attached IS are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Michael Krause (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to mkrause@aqmd.gov. Comments must be received no later than 5:00 PM on October 14, 2005. Please include the name and phone number of the contact person for your agency. Questions relative to the proposed rule should be directed to Mr. Chris Abe at (909) 396-3154.

The Public Hearing for the proposed rules is scheduled for December 2, 2005. (Note: Public meeting date is subject to change).

Date: September 14, 2005

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

Reference: California Code of Regulations, Title 14, Sections 15082(a), 15103, and 15375

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182

**NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL
ASSESSMENT**

Project Title:

Initial Study: Proposed Rules 3501 - Recordkeeping for Locomotive Idling and 3502 - Minimization of Emissions from Locomotive Idling

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air 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 and the Mojave Desert Air Basin

Description of Nature, Purpose, and Beneficiaries of Project:

The purpose of proposed Rules 3501 and 3502 will be to quantify and reduce emissions that occurs from idling locomotives in the South Coast Air Basin. PR 3501 requires recordkeeping of the locomotive idling activity and PR 3502 requires reduction of emission during idling. An environmental analysis will be conducted evaluating the environmental impacts from implementing the requirements of the proposed project and determine whether those impacts are significant.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

**Initial Study and all supporting
documentation are available at:**

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

or by calling:

(909) 396-2039

**or by accessing the SCAQMD's website
at:**

<http://www.aqmd.gov/ceqa/aqmd.html>

The Public Notice of Preparation is provided through the following:

Los Angeles Times (September 15, 2005) SCAQMD Website SCAQMD Mailing List

Initial Study Review Period:

September 15, 2005 – October 14, 2005

Scheduled Public Meeting Dates (subject to change):

SCAQMD Governing Board Hearing: December 2, 2005, SCAQMD Headquarters

Send CEQA Comments to:

Mr. Michael Krause

Phone:

(909) 396-2706

Email:

mkrause@aqmd.gov

Fax:

(909) 396-3324

Direct Questions on Proposed Rules:

Mr. Chris Abe

Phone:

(909) 396-3154

Email:

cabe@aqmd.gov

Fax Number:

(909) 396-3324

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study for:

**Proposed Rules 3501 – Recordkeeping for Locomotive Idling, and 3502 -
Minimization of Emissions from Locomotive Idling**

September 15, 2005

SCAQMD No. 050915MK

Executive Officer

Barry R. Wallerstein, D.Env.

Deputy Executive Officer

Planning, Rule Development and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer

Planning, Rule Development and Area Sources

Laki Tisopoulos, Ph.D., P.E.

Planning and Rules Manager

Susan Nakamura

Author:	Michael Krause	Air Quality Specialist
Technical Assistance:	Chris Abe Andrew Lee, P.E.	Air Quality Specialist Program Supervisor
Reviewed By:	Steve Smith, Ph.D. Peter Greenwald Barbara Baird Frances Keeler	Program Supervisor Senior Policy Advisor Principal Deputy District Counsel Senior Deputy District Counsel

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

JANE CARNEY
Senate Rules Committee Appointee

BEATRICE J.S. LAPISTO-KIRTLEY
Mayor, City of Bradbury
Cities Representative, Los Angeles County, Eastern Region

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

JAMES SILVA
Supervisor, Second District
Orange County Representative

CYNTHIA VERDUGO-PERALTA
Governor's Appointee

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

EXECUTIVE OFFICER:

BARRY R. WALLERSTEIN, D.Env.

TABLE OF CONTENTS

CHAPTER 1 - PROJECT DESCRIPTION

Introduction.....	1-1
Legislative Authority	1-2
California Environmental Quality Act	1-3
Project Location	1-4
Project Background	1-5
Project Objectives	1-10
Project Description	1-10
Control Technology	1-12
Alternatives.....	1-13

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction.....	2-1
General Information.....	2-1
Environmental Factors Potentially Affected	2-1
Determination.....	2-2
General Effects of the Proposed Project.....	2-3
Environmental Checklist and Discussion	2-4

FIGURES

Figure 1-1 - South Coast Air Quality Management District.....	1-5
---	-----

TABLES

Table 1-1 – Proposed Rules 3501 and 3502 Requirements	1-10
Table 2-1 - Air Quality Significance Thresholds.....	2-8

APPENDICES

Appendix A – PR 3501 - Recordkeeping for Locomotive Idling	
Appendix B – PR 3502 - Minimization of Emissions from Locomotive Idling	

CHAPTER 1 - PROJECT DESCRIPTION

Introduction

Legislative Authority

California Environmental Quality Act

Project Location

Project Background and Objective

Project Description

Alternatives

Control Options

INTRODUCTION

The South Coast Air Quality Management District (SCAQMD), as Lead Agency, has prepared this Initial Study (IS) to provide a preliminary analysis of environmental impacts that may be generated by proposed Rule (PR) 3501 - Recordkeeping for Locomotive Idling and PR 3502 - Minimization of Emissions from Locomotive Idling. The South Coast Air Basin has seen improved air quality and reduced levels of toxic exposure over the last 25 years. Despite the large reduction in emissions, exceedances of air quality standards still occur and the average cancer risk due to airborne toxics within the area of the SCAQMD jurisdiction is estimated to be about 1400 in one million (Multiple Air Toxics Emissions Study II, SCAQMD, 1999). In 1998, the California Air Resources Board (CARB) identified diesel particulate matter (PM) as a toxic air contaminant (TAC) based on its cancer causing potential. The MATES-II identified diesel emissions as responsible for approximately 70 percent of the carcinogenic risk from air toxics. Accordingly, consistent with the SCAQMD's Air Toxics Control Plan (ATCP) control measure AT-MBL-09, the SCAQMD is proposing to reduce exhaust emissions from locomotive idling.

California's 1994 State Implementation Plan (SIP) control measure M14 assumes that cleaner federally-complying locomotives will be operated in California and the South Coast Air Basin (SCAB). As a result of measure M14, CARB staff developed a Memorandum of Understanding (MOU) with The Burlington Northern and Santa Fe Railway Company (BNSF) and Union Pacific Railroad Company (UP) and the United States Environmental Protection Agency (U.S. EPA) that was signed in July 1998. The MOU includes provisions for early introduction of clean units, with requirements for a fleet average in the SCAB equivalent to U.S. EPA's Tier 2 locomotive standard by 2010.

Rail operations, characterized primarily by activities associated with operation of diesel locomotives, are a significant source of diesel PM emissions and other criteria pollutants such as oxides of nitrogen (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO_x). The 2003 Air Quality Management Plan (AQMP) estimates train particulate matter less than 10 microns (PM₁₀) emissions of 1.01 tons per day and emissions of particulate matter less than 2.5 microns (PM_{2.5}) of 0.93 ton per day.¹ Diesel exhaust is a complex mixture of gases and fine particles emitted by diesel-fueled internal combustion engines. Diesel exhaust contains many carcinogenic compounds, including, but not limited to, arsenic, benzene, formaldehyde, 1-3-butadiene, and ethylene dibromide.²

¹ South Coast Air Quality Management District, 2003. 2003 Air Quality Management Plan: Appendix III – Base and Future Year Emission Inventories.

² California Environmental Protection Agency, Air Resources Board and Office of Environmental Health Hazard Assessment, 1998. Executive Summary for the “Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant.”

PR 3501 would establish a program for rail operators to keep records of locomotive idling events and make available for public review. PR 3502 would minimize emissions from locomotive idling by prohibiting idling for more than 60 minutes under specific conditions or reducing an equivalent amount of emissions through implementation of other techniques.

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code §21000 et seq.), this Initial Study (IS) has identified environmental topic areas that may be adversely affected by the proposed project. The potentially significant adverse environmental impacts identified in this IS will be further analyzed in a Program Environmental Assessment (PEA).

Throughout this document, references to “proposed project” or “PRs 3501 and 3502” are one in the same and used interchangeably.

LEGISLATIVE AUTHORITY

The California Legislature created the SCAQMD in 1977 (Lewis-Presley Air Quality Management Act, California Health and Safety Code §§ 40400 et seq.) as the agency responsible for developing and enforcing air pollution control rules and regulations in the Basin and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, SCAQMD is required to adopt an AQMP demonstrating compliance with all state and federal ambient air quality standards for the District [California Health and Safety Code §40460(a)]. Furthermore, SCAQMD must adopt rules and regulations that carry out the AQMP [California Health and Safety Code, §40440(a)]. According to Health and Safety Code §39656, California legislature has delegated the air districts, including the SCAQMD, to establish and implement a program to regulate TACs.

The authority to regulate air pollution in California is divided between the CARB and the local and regional air pollution control districts. Under state law “local and regional authorities have the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles. The control of emissions from motor vehicles, except as otherwise provided in this division, shall be the responsibility of the State board.” (Health & Safety Code §40000.) Locomotives are not motor vehicles. (California Vehicle Code §415(a)). A “vehicle” is “a device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.” (California Vehicle Code §670). Because they do not operate on the highway and because they operate on stationary tracks, locomotives are not “vehicles.” Since they are not vehicles, they are under the jurisdiction of the air districts. (Health & Safety Code §40000.) CARB was granted authority to regulate locomotives by Health & Safety Code §43013(b), as amended in 1988.

However, even after the enactment of this statute, the air districts retain concurrent authority to regulate nonvehicular sources, including locomotives. (Manaster & Selmi, California Environmental Law and Land Use Practice, §41.06 (2))

Pursuant to California Health & Safety Code §41511, the SCAQMD may adopt rules and regulations to require railroads to gather information regarding their emissions of both criteria and toxic pollutants for the determination of the amount of such emission from such source. In general, the air districts may regulate locomotives to prevent endangerment of the public's health (potential health impacts from TACs), public nuisance (annoyance to neighbors) as well as to reduce the emissions of criteria air pollutants in order to achieve and maintain state and federal ambient air quality standards [California Health & Safety Code §41700]. The California Supreme Court has upheld the air districts' authority to regulate toxic air emissions from sources within their jurisdiction. *Western Oil & Gas Assoc. v. Monterey Bay Unified Air Pollution Control Dist.* (1989) 49 Cal. 3rd 408.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PRs 3501 and 3502 are a "project" as defined by CEQA (California Public Resources Code §21080.5). SCAQMD is the lead agency for the proposed project and has prepared this IS pursuant to its certified regulatory program (SCAQMD Rule 110). 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 (EIR) once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

CEQA requires that the 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 IS to identify potential adverse environmental impacts associated with adopting and implementing proposed Rules 3501 and 3502 that will be further analyzed in the PEA.

The SCAQMD has decided to prepare a PEA for the proposed Rules 3501 and 3502 since the proposed project is: (1) a series of actions that are related geographically; (2) logical parts in the chain of contemplated actions; (3) connected with the issuance of rules/regulations, which is a continuing program; and/or (4) carried out under the same authorizing statutory or regulatory authority having generally similar environmental effects which can be mitigated in similar ways. The proposed railroad rules are geographically related in that the contemplated project affects locomotives throughout the SCAQMD's jurisdiction. The proposed railroad rules are logical parts

of a chain of contemplated actions in that the rules are geared toward reducing exhaust emissions from locomotives. Additionally, the proposed rules implement the control measure AT-MBL-09 – Control of Locomotive Idling Emissions in the SCAQMD’s ATCP. Lastly, as subsequent railroad rules are adopted to reduce TACs and criteria pollutants from mobile sources, these subsequent actions will be analyzed to determine the appropriate CEQA document to analyze the impacts from the proposed project.

The purposes of the IS are to: provide the lead agency with the information to use as the basis for deciding whether to prepare a CEQA document with significant impacts (EIR equivalent) or a CEQA document with no significant impacts (Negative Declaration equivalent). If the lead agency decides, on the basis of preparing an initial study, that an EIR or EIR-equivalent CEQA document is warranted, the initial study assists in the preparation of the CEQA document by focusing on the effects determined to be significant, identifying effects not significant, and explaining the reasons for determining why potentially significant effects would not be significant. All comments received during the public comment period on the IS will be responded to and included in the Draft PEA.

PROJECT LOCATION

PRs 3501 and 3502 would apply to the SCAQMD’s entire area of jurisdiction. The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the 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. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

**FIGURE 1-1**

South Coast Air Quality Management District

PROJECT BACKGROUND

Proposed Rule 3503

The SCAQMD initially proposed four railyard rules as a project for adoption by the Board but has now closely considered whether the contents of the four rules are so intimately related that joint consideration is necessary. Based on that evaluation, staff determined that PR 3503 - Emissions Inventory and Health Risk Assessment for Railyards, should be proposed separately. The requirements of PR 3503 are independent of the other railroad rules, and PR 3503 serves information-gathering and information-disseminating purposes that are quite distinct from the purposes and requirements of each of the other proposed rules. PR 3503 will serve those independent, information-related purposes whether or not any other rules are adopted. Furthermore, separate consideration of PR 3503 will increase the public's

ability to consider in depth the types of information that would enhance public knowledge of risks inherent in railyard emissions. Accordingly, the staff will propose that the Board adopt PR 3503 regardless of whether it adopts any other railroad rules.

PR 3503 is an information-gathering and information-disseminating rule that requires railroads to develop an emissions inventory and health risk assessment to estimate cancer risk, chronic and acute hazard indices, as well as cancer burden caused by emissions at railyards. In addition, PR 3503 also requires public notification if the approved health risk assessment exceeds a certain risk threshold level.

Information gathered by this rule may or may not be used in future rulemaking that has not been approved adopted or funded. Accordingly, PR 3503 is exempt from CEQA pursuant to the categorical exemption for information collection. CEQA Guidelines §15306 exempts information-gathering either for its own sake or as part of a study leading to future action which the agency has not yet taken. Further, the PR 3503 will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource.

Implementing PR 3503 will have no significant adverse environmental impacts. Since the requirements are administrative in nature, it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, and thus, PR 3503 is also exempt from the requirements of CEQA pursuant to state CEQA Guidelines §15061(b)(3).

Since PR 3503 is an information-gathering and information-disseminating rule, it is not expected to generate any adverse environmental impacts. Nor is it expected to cause cumulative impacts in conjunction with other projects that may occur concurrently with or subsequent to the proposed project (CEQA Guidelines §15065(a)(3)). Where, as here, a proposed project has no environmental impacts whatsoever, it does not contribute to any cumulative impact, and cumulative impacts created by other projects need not be discussed. In the case of PR 3503, the proposed project's contribution to a potentially significant cumulative impact cannot be cumulatively considerable and, thus, is not significant (CEQA Guidelines §15065(a)(3)).

PR 3501 and 3502 are not reasonably foreseeable consequences of the adoption of PR 3503. PR 3503 is not a prerequisite to the adoption of the former two rules; those rules can be adopted whether or not the SCAQMD adopts PR 3503. Because PR 3501 and 3502 do not depend on the adoption of PR 3503, they are not "consequences" of the adoption of PR 3503. Nor will PR 3501 and 3502 likely change the scope of PR 3503, which has its own independent purpose. Therefore, 3501 and 3502 can be analyzed separately from PR 3503.

Proposed Rule 3504

PR 3504 was also one of four railyard rules originally announced together for adoption by the Board. Based on comments from the regulated industry and ongoing railroad engine emissions testing, the SCAQMD is withdrawing PR 3504 at this time. If SCAQMD staff resumes work on PR 3504, the rule will undergo the appropriate CEQA analysis. At present, it is not possible to determine what will be the environmental effects of PR 3504 since it is uncertain what the rule will require; therefore any attempt at analysis would be speculative.

Diesel PM as TAC

Diesel exhaust is listed by CARB as a TAC and has the potential to cause cancer in humans. Long-term exposure to diesel PM poses the highest cancer risk of any toxic air contaminant evaluated by the Office of Environmental Health Hazard Assessment (OEHHA). The second Multiple Air Toxics Exposure Study (MATES-II), released in 2000, shows that approximately 70 percent of the cancer risk from air toxics in the Basin is due to diesel PM. Exposure to diesel exhaust can irritate the eyes, nose, throat and lungs and can cause coughs, headaches, light-headedness, and nausea. In addition to cancer risks, exposure to diesel PM has been shown to increase susceptibility to allergens, such as dust and pollen and can aggravate chronic respiratory problems such as asthma. Diesel engines are major sources of fine particle pollution and can particularly affect sensitive people, such as the elderly and people with emphysema, asthma, and chronic heart and lung disease. Children, whose lungs and respiratory systems are still developing, are also more susceptible than healthy adults to fine particles because they have a higher breathing rate. Exposure to fine particles is associated with increased frequency of illness and reduced growth in lung function in children.

Studies on diesel exhaust have focused on non-cancer health effects from short-term and long-term exposure, reproductive and developmental effects, immunological effects, genotoxic effects, and cancer health effects.³ Overall, there are insufficient data to show short- or long-term non-cancer health effects and the available literature did not determine whether exposure to diesel exhaust causes reproductive, developmental, or teratogenic effects in humans. In terms of immunological effects, studies show that diesel exhaust exposure increases antibody production and causes localized inflammation of lung and respiratory tract tissues, particularly when exposure accompanies other known respiratory allergens. Diesel exhaust particles and diesel exhaust extracts have been determined to be genotoxic and may be involved in initiation of human pulmonary carcinogenesis. In terms of cancer health effects, over 30 epidemiological studies have investigated the potential

³ California Environmental Protection Agency, Air Resources Board and Office of Environmental Health Hazard Assessment, 1998. Executive Summary for the “Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant.”

carcinogenicity of diesel exhaust³. The National Institute of Occupational Health and Safety recommended in 1988 that diesel exhaust be regarded as a potential occupational carcinogen based on animal and human evidence. The Health Effects Institute (1995) and the World Health Organization (1996) also evaluated the carcinogenicity of diesel exhaust and found the epidemiological data to show associations between exposure to diesel exhaust and lung cancer³.

In 2001, OEHHA identified diesel PM as one of the TACs that may cause children or infants to be more susceptible to illness pursuant to the requirements of Senate Bill 25 (Stats. 1999, ch. 731). Senate Bill 25 also requires CARB to adopt control measures, as appropriate, to reduce the public's exposure to these special TACs [California Health & Safety Code §39669.5].

Criteria Pollutants

Beside diesel particulate matter, locomotives are significant sources of NO_x, a precursor of PM_{2.5}, PM₁₀, and ozone. Since the district is designated nonattainment for these three pollutants, SCAQMD is responsible for reducing PM and NO_x emissions, as well as toxic diesel particulate emissions sources over which it has jurisdictional authority to regulate. The 2003 AQMP estimates NO_x emissions of 36.52 tons per day and PM₁₀ emissions of 1.01 tons per day from locomotives. VOC, CO, SO_x, and PM_{2.5} emissions are estimated to be 1.82, 6.42, 3.25, and 0.93 tons per day, respectively.⁴ NO_x and VOC are the primary contributors to ozone formation. In addition, NO_x and PM affect visibility.

Locomotives and Locomotive Activity

Railroads are used to move more than 40 percent of the freight moved in the United States, on a ton-miles basis⁵. In 2002, there were 554 railroads in the United States, operating on approximately 142,000 miles of track.⁶ During this same period, 30 freight railroads operated over approximately 5,900 miles of track in California.⁷ Two railroads with operations in California, The Burlington Northern and Santa Fe Railway Company (BNSF) and Union Pacific Railroad Company (UP), are categorized as Class I railroads by the U.S. Department of Transportation, Surface Transportation Board. Class I railroads are those with operating revenues of at least \$250 million (49 CFR Part 1201 Subpart A) and primarily transport freight rather than passengers. The remainder of the railroads operating in California are classified

⁴ South Coast Air Quality Management District, 2003 Air Quality Management Plan: Appendix III – Base and Future Year Emission Inventories.

⁵ Association of American Railroads, 2004, Overview of U.S. Freight Railroads.

⁶ Association of American Railroads, 2004, Railroad Service in the United States – 2002

⁷ Association of American Railroads, 2004, Railroad Service in California – 2002.

as regional railroads (non-Class I line-haul railroads operating 350 or more miles of track and/or with revenues of at least \$40 million), local railroads (railroads which are neither Class I nor a regional railroads and engaged primarily in line-haul service), or switching and terminal railroads (non-Class I railroads engaged primarily in switching and /or terminal services for other railroads). There are currently four railroads with operations in the district, consisting of the two Class I railroads (BNSF and UP) and one switching and terminal railroad (Pacific Harbor Line, Inc. (PHL)). CARB estimates that BNSF and UP operate approximately 240 locomotives exclusively in the district, while Los Angeles Junction Railway (LAJ) and PHL operate approximately 25 locomotives exclusively in the district⁸, all of which would be subject to Proposed Rules 3501 and 3502. Line haul locomotives operating in the district would also be subject to Proposed Rules 3501 and 3502 requirements. The Class I railroad line haul operations are both interstate and intrastate and do not operate exclusively in the district.

Locomotive Emissions Testing

Based on comment received by the American Association of Railroads (AAR) on April 25, 2005, regarding the potential trade-off between start-up and idling emissions, the SCAQMD staff is conducting emissions testing to compare start-up and idling emissions. Due to the lack of available information regarding start-up emissions, emissions testing needs to be conducted to provide this information for SCAQMD during rule development, as well as for other regulatory agencies, railroads, and locomotive manufacturers.

On July 8, 2005, SCAQMD Governing Board approved the awarding of a contract to Southwest Research Institute (SwRI), an independent nonprofit applied research and development organization, to conduct engine testing at start-up and during idling of a locomotive to measure locomotive start-up and idling emissions. SwRI will conduct emissions testing on up to four locomotives and the testing will measure start-up and idling emissions of PM, NOx, CO, and hydrocarbons. SwRI, in cooperation with SCAQMD staff, will finalize a test procedure to be used in this project, which will specify locomotive models to be evaluated, the locomotive test procedure and test cycle, testing equipment to be used, and duration of testing. Following the testing phase, SwRI will analyze the data. SwRI has performed over 120 locomotive exhaust emission tests at the Locomotive Technology Center (LTC), on projects for the U.S. EPA, CARB, original equipment manufacturers, engine component suppliers, the American Association of Railroads (AAR), and for individual railroads. The LTC provides a centralized location, direct access to a Class 1 main line, two EPA certification-capable locomotive emissions test tracks, and a full-time

⁸ California Environmental Protection Agency, Air Resources Board, 2004, Staff Report: Initial Statement of Reasons – Public Hearing to Consider Proposed Regulatory Amendments Extending the California Standards for Motor Vehicle Diesel Fuel to Diesel Fuel Used in Harborcraft and Intrastate Locomotives.

professional staff with extensive experience in locomotive exhaust emissions testing. SwRI has experience in measuring emissions from the large variety of in-use locomotives, from low-power switchers with multiple exhaust stacks and requiring an external load grid, to today's new production, electronically-controlled EPA Tier 2 locomotives.

Quantifying the emissions from locomotive idling will provide information to assess if the idling time limitation requirements in PR 3502 will result in potential for higher emissions, if any, if re-starting the engine generates more emissions than if the locomotive was left idling.

PROJECT OBJECTIVES

The objectives of PRs 3501 and 3502 are to:

1. Implement the control measure AT-MBL-09 – Control of Locomotive Idling Emissions in the SCAQMD's ATCP.
2. Reduce emissions from locomotive idling.
3. Reduce public exposure to emissions from locomotive idling.

PROJECT DESCRIPTION

The basic components of PRs 3501 and 3502 are listed in Table 1-1. The rules apply to Class I freight railroads and switching and terminal freight railroads that operate locomotives in the district. Passenger railroads operating in the district, such as Amtrak and Metrolink, would be excluded from the requirements of the proposed rules. For complete versions of PRs 3501 and 3502, the reader is referred to Appendix A and B, respectively, of this IS.

TABLE 1-1

Proposed Rules 3501 and 3502 Requirements

	Proposed Rule 3501	Proposed Rule 3502
Purpose	<ul style="list-style-type: none"> • Record idling events 	<ul style="list-style-type: none"> • Minimize emissions from continuous idling of locomotives.
Applicability	<ul style="list-style-type: none"> • Class I freight railroads and switching and terminal freight railroads that operate locomotives in the Basin. 	<ul style="list-style-type: none"> • Class I freight railroads and switching and terminal freight railroads that operate locomotives in the Basin.

TABLE 1-1 (CONTINUED)

Proposed Rules 3501 and 3502 Requirements

	Proposed Rule 3501	Proposed Rule 3502
Definitions	<ul style="list-style-type: none"> • Alternative Fuel • Anti-Idling Device • Basin • Class I Freight Railroad • Controlling or Lead Locomotive • Idling or Idling Event • Interbasin Locomotive • Intrabasin Locomotive • Locomotive • Operator • Railroad • Switching and Terminal Railroad • Trailing Locomotive • Unoccupied Locomotive 	<ul style="list-style-type: none"> • Anti-Idling Device • Basin • Class I Freight Railroad • Controlling or Lead Locomotive • Continuously Idle • Emergency Vehicle • Locomotive • Locomotive Engine • Maintenance or Diagnostic Purposes • Operator • Railroad • Switching and Terminal Railroad • Trailing Locomotive • Unoccupied Locomotive
Rule Requirements	<ul style="list-style-type: none"> • Keep record of each idling event longer than 60 minutes occurring between 6 months from rule adoption and June 30, 2008. • Keep record of each idling event longer than 30 minutes on and after July 1, 2008. • Idling events recorded in accordance with approved idling monitoring and recording plan. • Submit record of idling events over last seven days. • Submit annual report providing information for each locomotive operated in the Basin. 	<p>On and after January 1, 2006:</p> <ul style="list-style-type: none"> • Controlling locomotives equipped with anti-idling device are prohibited from continuously idling for more than 15 minutes while unoccupied. • Controlling locomotives not equipped with anti-idling device are prohibited from continuously idling for more than 30 minutes while unoccupied or trailing locomotive not connected to one or more railcars. • Trailing locomotives equipped with anti-idling device are prohibited from continuously idling for more 15 minutes. • Trailing locomotives not equipped with anti-idling device are prohibited from continuously idling for more 30 minutes.

TABLE 1-1 (CONCLUDED)

Proposed Rules 3501 and 3502 Requirements

	Proposed Rule 3501	Proposed Rule 3502
Requirements for Plans	<ul style="list-style-type: none"> • Submit idling monitoring and recording plan or alternative compliance plan within three months after rule adoption. • Plan will be approved or disapproved 90 days after submittal. • If disapproved, plan shall be revised and resubmitted within 90 days of decision. • Within 90 days of the submittal of the revised plan, the revised plan shall be approved or disapproved. 	<ul style="list-style-type: none"> • Submit emission equivalency plan within 90 days of its intended use. • Emission equivalency plan will be approved or disapproved 90 days after submittal. • If disapproved, plan shall be revised and resubmitted within 90 days of decision. • Within 90 days of the submittal of the revised plan, the revised plan shall be approved or disapproved.
Fees	<ul style="list-style-type: none"> • Plan submittal subject to Rule 306 – Plan Fees 	<ul style="list-style-type: none"> • The emission equivalency plan submittal subject to Rule 306 – Plan Fees
Penalties	<ul style="list-style-type: none"> • Failure to comply with requirements of the rule is subject to penalties under Health and Safety Code §42400 et seq. 	<ul style="list-style-type: none"> • Failure to comply with requirements of the rule is subject to penalties under Health and Safety Code §42400 et seq.
Exemptions	<ul style="list-style-type: none"> • Locomotives are exempt from rule requirements if equipped with anti-idling device limiting idling time to below 15 minutes or operate fleet with alternative fuels. • Railroads submitting and implementing an Alternative Compliance Plan are exempt from submitting idling, monitoring and reporting plans, and recording idling events. 	<ul style="list-style-type: none"> • Exempt from requirements if locomotive is an emergency vehicle; idling for maintenance; idling to prevent freezing of engine coolant; idling for safety purposes; idling to provide heating or cooling; preempted by federal law; or implementing an approved emission equivalency plan.

CONTROL TECHNOLOGY*Scrubber*

One possible method of emission control would involve capturing the exhaust emissions from locomotives idling in the service area of the railyard and sending those emissions through a scrubber. A mobile “bonnet” would be placed over the exhaust vent of the idling locomotive and provide a route to a network of exhaust ducts located above the locomotive. The exhaust ducts would provide an enclosed pathway through which the particulate emissions are transported to a scrubber which

can control particulate emissions through careful equipment design and process control. The removal efficiencies can range from 90 to 99.9 percent, depending on the type of scrubber (wet, dry, cyclone, orifice, etc.) and the scrubbing reagent (hot gas, water, caustic solution, etc.) selected.

Catalyst

Another type of control involves ceramic catalysts for diesel engines which filter out the particulates before the exhaust emissions are emitted into the ambient air. The catalysts are expected to be attached to the exhaust vent on the locomotive.

ALTERNATIVES

The Draft PEA will discuss and compare relative merits of alternatives to the proposed project as required by CEQA and by SCAQMD Rule 110 when there are significant adverse impacts. Alternatives must include realistic measures for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. Alternatives should be designed to mitigate the significant adverse environmental impacts of the project. In addition, the range of alternatives must be sufficient to permit a reasoned choice and it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. Suggestions on alternatives submitted by the public will be evaluated for inclusion in the Draft PEA.

SCAQMD Rule 110 does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than is required for an Environmental Impact Report under CEQA. Alternatives will be developed based in part on the major components of the proposed rule. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative." Written suggestions on potential project alternatives received during the comment period for the Initial Study will be considered when preparing the Draft PEA.

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 PRs 3501 and 3502.

GENERAL INFORMATION

Name of Proponent: South Coast Air Quality Management District

Address of Proponent: 21865 Copley Drive
Diamond Bar, CA 91765

Lead Agency Name: South Coast Air Quality Management District

CEQA Contact Person: Michael Krause (909) 369-2706

Rule Contact Person: Chris Abe (909) 396-3154

Name of Project : Proposed Rules 3501 - Recordkeeping for Locomotive Idling
and 3502 - Minimization of Emissions from Locomotive
Idling

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. Any checked items represent areas that 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"/> Geology and Soils | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Solid/Hazardous Waste |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Transportation./Traffic |
| <input checked="" type="checkbox"/> Energy | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings |

DETERMINATION

On the basis of this initial evaluation:

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

Date: September 15, 2005

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor – CEQA
Planning, Rule Development, and Area
Sources

GENERAL EFFECTS OF THE PROPOSED PROJECT

The proposed project will provide an overall air quality benefit from both the reduction of toxics and criteria pollutants that result from the idling of Class I freight railroads, switching and terminal freight railroads that operate locomotives (to be called “affected locomotives” or “locomotives” in the following analysis).

PR 3501 will require the recording of idling events to quantify emissions from such activity. This rule will have no direct or indirect environmental impacts and, thus, will not be further analyzed.

PR 3502 will minimize emissions and toxic risk from long duration idling events by affected locomotives. Stakeholders have expressed concern regarding potentially higher emissions from restarting the locomotive engine(s) when ready to operate compared to allowing the locomotives to idle continuously. In order to quantify the emissions from re-starting the locomotive engine(s) as compared to allowing the continuous idling, emissions testing of locomotives is currently taking place to establish an idling time limitation that would ensure the emissions from restarting the engine are not greater than if the locomotives were allowed to continuously idle.

As part of PR 3501 and PR 3502 stakeholder working group meetings, the SCAQMD has received comments that limiting idling will: create significant noise impacts when restarting locomotives, and an increase in the re-start failure rate and system delays, both potentially resulting in increased number of locomotives needed to move product and, thus, more idling. These impacts will be addressed in the following environmental checklist and evaluated further as necessary in the Draft PEA.

Other comments received by the SCAQMD from stakeholders include railroads shifting operations outside of the district to other locations in California and a long-term shift from transporting cargo by train to transport by truck, thus, resulting in an overall increase in emissions operations to other locations and a mode shift to increased trucking of cargo. These issues are considered to be speculative, are not supported by any credible evidence, and could already occur for other business-related reasons regardless of the implementation of the proposed rules. Therefore, these two potential effects of PRs 3501 and 3502 will not be evaluated further.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	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 would be considered significant if:

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

DISCUSSION

a) through d) Alternative fuel stations might be constructed as a result of PRs 3501 and 3502, however they would be expected to be constructed at existing facilities or areas where locomotives are currently fueled. Similarly, exhaust ducts constructed in service areas to help connect idling exhaust emissions to control technology, such as a central air scrubber. Thus, the newly constructed stations would be expected to blend with existing structures, if not an improvement over the existing structures. The new structures would

not be expected to worsen existing views that might obstruct scenic resources. The proposed project would restrict idling requirement on affected locomotives located throughout the district operating on existing rail lines so no changes to the visual continuity of the surrounding area is expected. Since the proposed requirements are expected to reduce the time locomotives idle, emissions, including visible particulate matter from the combustion of diesel fuel used to power the locomotives, are expected to be reduced. Thus, implementing the proposed rules will improve aesthetics by reducing diesel particulate matter emissions that obstruct or damage scenic vistas thereby improving visibility of the surrounding area. In addition, the proposed project is not expected to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway because idling restrictions would only occur at existing railroad operations.

PRs 3501 and 3502 do not require night operations or change any existing night operations of the locomotives. Thus, implementing idle reduction measures at night would only be necessary if an affected locomotive operates at night, which would already be lighted for safety and security. As a result the proposed project is not anticipated to create or require any new sources of light or glare which would adversely affect day or nighttime views in any scenic areas.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on aesthetics. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

SIGNIFICANCE CRITERIA

Project-related impacts on agricultural resources would 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

a) and c) The proposed project would reduce idling exhaust emissions from the affected locomotives operating on existing rail lines in the district. The proposed rules do not, however, require the acquisition of any land for the construction of any building or structure, and do not require conversion of farmland to other uses. The proposed rules would not convert any existing, prime or unique farmland to a non-agricultural use; nor would the proposed rules cause other changes to the existing environment which would result in the conversion of any existing, prime or unique farmland to a non-agricultural use.

b) The proposed rule would reduce idling emissions from the affected locomotives operating on existing rail lines in the district, thus, reducing public exposure to locomotive idling emissions, which includes TAC emissions. The proposed rules have no effect on, and would not conflict with existing zoning or any Williamson Act contracts, because the proposed project does not require acquisition of any land that may currently be subject to a Williamson Act contract.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on agricultural resources. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>

SIGNIFICANCE CRITERIA

Impacts will be evaluated and compared to the significance criteria in Table 2-1. If impacts equal or exceed any of the following criteria, they will be considered significant.

TABLE 2-1
Air Quality Significance Thresholds

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

^a SCAQMD CEQA Handbook (SCAQMD, 1993)

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

^c 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

DISCUSSION

(a) Ultimately, it is the responsibility of the SCAQMD under state and federal law to reduce emissions of those substances that impair public health including primary and secondary air contaminants. Pursuant to the provisions of both the state and federal CAA, the SCAQMD is required to attain the federal ambient air quality standards for all criteria pollutants, including PM₁₀. The SCAQMD's planning document which sets forth policies and measures to achieve federal and state air quality standards in the region is the AQMP. The AQMP strategy includes measures which target stationary, mobile and indirect sources. These measures are based on feasible methods of attaining ambient air quality standards. The proposed rule would assist the SCAQMD in its efforts to attain state and federal PM₁₀ air quality standards. In addition, the proposed railroad rules implement the control measures AT-MBL-08 – Locomotive Operations and AT-MBL-09 – Control of Locomotive Idling Emissions as outlined in the SCAQMD's ATCP. Implementing measures in the ATCP reduces toxic risk to the public in accordance with the Health and Safety Code §39656, which delegates to the air districts, including the SCAQMD, the authority to establish and implement a program to regulate TACs.

Because the proposed project will not hinder implementation of the 2003 AQMP and would assist in fulfilling the goals in the 2000 ATCP, this topic will not be further analyzed in the draft PEA.

(b) and (c) PR 3502 is designed to reduce toxic risk and locomotive exhaust emissions from diesel PM₁₀ emissions by limiting the amount of time a locomotive is allowed to continuously idle or by using a control technology or alternative fuel. The potential adverse secondary air quality impacts generated from the construction and operational activities associated with the use of control technology or alternative fuels will be evaluated in the draft PEA.

In addition, stakeholders have raised a concern that secondary effects of the proposed project include the potential occurrence of failures from re-starts and potential delays on roadways at railroad crossings causing an increase in on-road mobile source idling activity. These secondary impacts will be evaluated in the Draft PEA.

As previously noted and due to a concern raised by stakeholders, current emissions testing of locomotives will assist in determining the time limitation for continuous idling of the affected locomotives to assess the potential increase of emissions, if any, from re-starting the locomotive engine(s) compared to allowing the continuous idling.

d) Sensitive receptors in the district are currently exposed to daily toxic risk from diesel particulate and other train idling emissions. PM₁₀ has been found to lodge within the lungs contributing to respiratory problems. Implementing the proposed project is intended to reduce train idling emissions, including PM₁₀ emissions, which would

reduce the exposure of surrounding neighborhoods around the facility, including sensitive receptors to PM10 concentrations. Reducing train idling emissions is expected to provide a benefit to sensitive receptors by improving public health in the vicinity of affected railroad facilities. This topic will not be further analyzed in the draft PEA.

e) The proposed project is expected to reduce locomotive idling which will reduce diesel emissions from the combustion of diesel fuel. Odors are often associated with diesel emissions. Existing odor impacts at affected facilities are expected to be reduced as a result of implementing the proposed project and, therefore, not significant. This topic will not be further analyzed in the draft PEA.

f) PRs 3501 and 3502 are new rules and implementing them is expected to assist the SCAQMD in its efforts to attain and maintain state and national ambient air quality standards for criteria pollutants and improve public health through reduction in toxic and emissions exposure. Thus, PRs 3501 and 3502 are not expected to diminish an existing air quality rule or future compliance requirements.

Based on the above discussion, the proposed project may generate significant adverse air quality impacts. Therefore, project-specific and cumulative air quality impact will be further analyzed in the draft PEA.

	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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

California Department of Fish and Game or
U.S. Fish and Wildlife Service?

- | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|
| 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 would 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

(a) and (b) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, exhaust and other criteria pollutant emissions from locomotive idling to surrounding communities. There are no provisions in the proposed rules that require or result in any specific disturbance of undisturbed habitat or have a direct or indirect impact on plant or animal species. No substantial adverse effect in sensitive plant or animal species is expected to result from implementing the proposed recordkeeping or idling reduction requirements. No riparian habitat or other sensitive natural community would be affected by PRs 3501 and 3502 because the affected locomotives operate on existing rail lines. Implementing the proposed rule may improve wildlife habitats by reducing particulate matter that may obstruct or damage these areas.

(c) The proposed rules do not require any direct removal, filling, hydrological interruption, or other activities in, or near, wetland areas as defined by §404 of the Clean Water Act (CWA). Thus, no adverse effects on these areas are expected.

(d), (e) and (f) There are no provisions in the proposed rule that conflict with any local policies or ordinances that protect biological resources. The proposed project would not interfere with the movement of any native or migratory animals, affect wildlife corridors, or impede the use of native wildlife nursery sites, because the affected locomotives operate on existing rail lines

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on biological resources. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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 pursuant to §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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

geologic feature?

- d) Disturb any human remains, including those interred outside formal cemeteries?

SIGNIFICANCE CRITERIA

Impacts to cultural resources would 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

a) through d) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, exhaust and other criteria pollutant emissions from locomotive idling to surrounding communities. The proposed rules may require minor demolition or construction of any buildings or structures if the alternative fuel option is chosen to comply with the proposed project. However, PRs 3501 and 3502 directly affect locomotives operating on existing rail lines which are located on previously disturbed land. Since the proposed project would not require soil disturbance outside the boundaries of the affected locomotives, no undisturbed cultural resources, such as historic, archaeological or paleontological resources or unique geologic features is anticipated as well as no disturbance of human remains or cemeteries as a result of adopting and implementing the proposed project.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on cultural resources. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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

The impacts to energy and mineral resources would 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

a), d) and e) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, exhaust and other criteria pollutant emissions from locomotive idling to surrounding communities. There are no provisions within the proposed rules which would conflict with adopted energy conservation plans, impact existing energy standards, or affect peak and base demands for electricity or other forms of energy.

b) and c) The energy analysis will determine the fuel needed for alternative clean-fuel vehicle operation from vehicle demand, lower fuel efficiencies (“worst-case”) and compressor operations used at alternative clean-fuel fueling stations. While additional energy need is not expected to require new utility systems, effects on local or regional energy supplies and on requirements for additional energy are anticipated. The project fuel usage from the proposed project’s operational activities will be evaluated in the Draft PEA and the potential significance of the impact will be determined at that time.

Based on the above discussion, the proposed project has the potential for adverse impacts on energy resources which will be further analyzed in the draft PEA.

	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 off-site 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 would be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, and 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

a & d) The proposed rules are intended to reduce toxic risk and locomotive idling exhaust emissions. Idling activities would occur on existing rail lines, so any risks associated with ground shaking, etc., are existing risks. If alternative fuel stations are constructed to support rule compliance, the affected sources would be expected to observe relevant requirements of the Uniform Building Code and any other state, county and city building and safety codes which account for seismic activity. As part of the issuance of building permits, local jurisdictions are responsible for assuring that the Uniform Building Code is adhered to 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 basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which

represents the foundation condition at the site. The Uniform Building Code requirements also consider liquefaction potential and establish stringent requirements for building foundations in areas potentially subject to liquefaction. The proposed project would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death is not anticipated and will not be further analyzed in the draft PEA.

b) If installing alternative fueling stations, minor site preparation, including grading, will occur, however, the activity is expected to comply with SCAQMD’s Rule 403 which will minimize soil erosion through soil watering requirements. The proposed rules do not contain any provisions that would require disruption of soils that could result in soil erosion or loss of topsoil. The affected locomotives operated on existing rail lines which were previously disturbed to construct.

c) The proposed project would occur at existing facilities and, therefore, is not expected to alter the existing exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. Additionally, the affected areas are not envisioned to be prone to new landslide, subsidence, liquefaction impacts or have unique geologic features since the affected locomotives are operated on existing rail lines for a number of years.

e) The proposed project does not require or involve the installation of septic tanks or alternative wastewater disposal systems. Therefore, no impacts from failures of septic systems related to soils incapable of supporting such systems are anticipated.

Based on the above discussion, the proposed project is not expected to have an adverse impact on geology or soils. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

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, and disposal of hazardous materials? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|-------------------------------------|--------------------------|--------------------------|

- | | | | |
|--|-------------------------------------|--------------------------|-------------------------------------|
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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

The impacts associated with hazards would 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

a) through c) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, exhaust and other criteria pollutant emissions from locomotive idling to surrounding communities. If alternative fuels or control technology are used to comply with the proposed rules, then there is potential for transport of alternative fuels which may result in the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public; emit hazardous emissions, or require the handling of hazardous materials within one-quarter mile of an existing or proposed school. Based on the above discussion, the proposed project has the potential for adverse impacts on hazard or hazardous materials which will be further analyzed in the draft PEA.

d) Government Code §65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). If any affected sites or operations are identified on such a list, compliance with the proposed rules is not expected to affect in any way any facility's hazardous waste handling practices.

e) & f) The proposed project does not require or involve the use or transport of hazardous materials that could adversely affect air traffic or safety. While some rail lines might be located within two miles of a public airport or within the vicinity of a private airstrip, freight cargo of the affected locomotives is not expected to change as a result of the proposed rules. Therefore PRs 3501 and 3502 are not expected to generate any new significant adverse hazards or hazardous materials impacts on air traffic or safety.

g) PR 3502 is intended to reduce toxic risk and locomotive idling exhaust emissions and contain no provisions that could interfere with any adopted emergency response or evacuation plans.

h) & i) Minor construction might result from the implementation of PRs 3501 and 3502, however, the construction is expected to take place at existing facilities and, therefore, the construction of any building, structure or facility is expected to be in wildlands or any location that could expose people or structures to significant loss, injury, or death involving wildland fires. Further, complying with the proposed rules by turning off the idling locomotive, using alternative fuels or operating control technology do not require or involve the use of flammable materials that could increase fire hazards in areas with flammable materials.

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 off-site?	<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"/>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

and resources, or are new or expanded entitlements needed?

- 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?

SIGNIFICANCE CRITERIA

Potential impacts on water resources would 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 would 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

(a) & (f) The proposed rules do not include any provisions that would either directly or indirectly require any use of water or waste discharge and, thus, the affected locomotives are not expected to violate any water quality standards or otherwise substantially degrade water quality as a result of the proposed project.

(b) & (n) The proposed rules might result in the soil being disturbed if alternative fuel stations are built or structures are needed for the control technology. As such, water may be applied to disturbed surfaces to control the fugitive dust. Thus, proposed rules might require additional water, and as a result, the proposed project does not require additional (from existing conditions) demands on water supplies. However, the proposed rules do not include any provisions which would knowingly affect groundwater resources, groundwater supplies or groundwater recharge. Based on the above discussion, the proposed project has the potential for adverse impacts on hydrology and water quality which will be further analyzed in the draft PEA.

(c), (d), (e) & (m) There are no provisions of the proposed rules which would alter existing drainage patterns, alter a stream or river, contribute to an increase in surface runoff, or require the construction of new storm water drainage facilities (or the expansion of existing storm water infrastructure).

(g), (h), (i) & (j) The proposed project does not require the construction of any new buildings or structures within a 100-year flood hazard area which could impede or redirect flood flows. Similarly, the proposed project will not expose people or structures to any new significant risk of loss, injury or death resulting from the failure of a levee or dam. No housing will be subject to any potential inundation by seiche, tsunami, or mudflow, as the proposed project does not require the major construction of any new buildings or structures.

(k), (l) & (o) The proposed rules do not include any provision which will require the construction of new or additional (e.g. expanded) wastewater infrastructure, or includes activities which would cause wastewater to be generated. Since PRs 3501 and 3502 will not generate wastewater, no wastewater treatment standards will be exceeded, and no effect on existing wastewater treatment capacity is expected.

Based on the above discussion, the proposed project has the potential for adverse impacts on hydrology and water quality which will be further analyzed in the draft PEA.

	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

a) through c) The net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from locomotive idling to the surrounding community. Typically, land use and other planning considerations are determined by local governments. No land use or planning requirements would be altered by the proposed project. No new rail lines are required or expected to be necessary to comply with the proposed rules and, thus, no land use or other planning decisions should stem from the proposed project. Finally, the proposed rules would not physically divide an established community, nor conflict with any land use, habitat conservation or natural community conservation plans.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on land use and planning. Since no significant adverse impacts are anticipated, no mitigation measures are 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 would 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

a) and b) No provisions of the proposed rules are expected to result in the loss of availability of known mineral resources, such as aggregate, minerals, etc., or the loss of availability of a locally-important mineral resource site. The net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from existing locomotive idling to the surrounding community.

Based on the above, no adverse impacts on mineral resources are expected. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

Potentially Less Than No

	Significant Impact	Significant Impact	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 would be considered significant if:

- Construction noise levels exceed 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

a), b) & c) Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, is intense enough to damage hearing, or is otherwise annoying (unwanted noise). Sound levels are measured on a logarithmic scale in decibels (dB). The universal measure for environmental sound is the "A" weighted sound level, dBA, which is the sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. "A" scale weighting is a set of mathematical factors applied by the measuring instrument to shape the frequency content of the sound in a manner similar to the way the human ear responds to sounds.

The State Department of Aeronautics and the California Commission of Housing and Community Development have adopted the Community Noise Equivalent Level (CNEL). The CNEL is the adjusted noise exposure level for a 24-hour day and accounts for noise source, distance, duration, single event occurrence frequency, and time of day. The CNEL considers a weighted average noise level for the evening hours, from 7:00 p.m. to 10:00 p.m., increased by five dBA, and the late evening and morning hour noise levels from 10:00 p.m. to 7:00 a.m., increase by 10 dBA. The daytime noise levels are combined with these weighted levels and averaged to obtain a CNEL value. The adjustment accounts for the lower tolerance of people to noise during the evening and nighttime periods relative to the daytime period.

Federal, state and local agencies regulate environmental and occupational, as well as, other aspects of noise. Federal and state agencies generally set noise standards for mobile sources, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of General Plan policies and Noise Ordinance standards, which are general principles, intended to guide and influence development plans. Noise Ordinances set forth specific standards and procedures for

addressing particular noise sources and activities. The Occupational Safety and Health Administration (OSHA) sets and enforces noise standards for worker safety.

No provisions of the proposed project expose persons to noise levels in excess of standards established in local general plans or ordinances, or standards of other agencies. PRs 3501 and 3502 do not include requirements which would directly expose people (either temporarily or permanently) to groundborne vibration or noise, or increase ambient noise levels.

The proposed project affects locomotives operating on existing rail lines. Permanent excessive noise levels generated around the affected locomotives, or excessive noise levels exposing people residing or working in the project area is not expected beyond what the neighborhood already experiences. There is a potential for periodic noise levels to rise (as addressed in subsection (d)) from the restarting of the locomotive engine(s), but the noise will not be permanent. The proposed project requires no additional equipment to the existing facilities which would cause noise level to exceed ambient levels.

Since no significant adverse impacts are anticipated, this topic will not be further analyzed in the draft PEA.

d) Noise complaints from the start up of the locomotives, as a result of complying with the requirements of PR 3502, could be louder than during existing idling activity. The draft PEA will further examine the noise levels of the locomotive engines and compare with the noise level of the continuous idling activity to determine if there is a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. The analysis will also consider noise attenuation (there is a six dBA drop in noise levels per doubling of distance) and compliance with local noise ordinances.

e) & f) Additional structures will not be required as part of the proposed project. While existing rail lines may exist within two miles of an airport, the proposed rules are not expected to generate noise at either affected facility that would affect any way airport land use plans or private airstrips since the increase noise will be periodic and noise attenuation should assist in reducing the noise to levels that will not significantly impact the airport, private air strips, or an airport land use plan. Since no significant adverse impacts are anticipated, this topic will not be further analyzed in the draft PEA.

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

SIGNIFICANCE CRITERIA

The impacts of the proposed project on population and housing would 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

a) through c) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from locomotive idling to the surrounding community. No new employees would be necessary to comply with the requirements of PRs 3501 and 3502. Minor construction might result from the proposed project if additional control technology or alternative fuel usage is chosen to comply with PR 3502. However, construction workers needed will be temporary and can be provided by the existing local labor pool and, thus, no provision of the proposed rules will induce growth either directly or indirectly; or displace any housing or substantial numbers of people, requiring the construction of replacement housing.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on population and housing. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 would 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

a) The use of alternative fuels to comply with the proposed rules could result in potential hazard risks with transport, storage and use of the alternative fuel not currently used. The draft PEA will further examine the potential increase need for fire protection services in comparison to the use of conventional fuels, such as diesel.

b) Limiting the ability to idle locomotives or the usage of alternative fuels or control technology will not require additional police protection than what is currently expected to maintain order and safety. The rule does not directly or indirectly require or result in the reduction of safe locomotives or railyards and, therefore, no significant adverse impacts are expected from police public services. The ability for police to respond as well as service ratios, response times or other emergency responder performance objectives will not be altered as a result of the proposed project. Since no significant adverse impacts are anticipated, this topic will not be further analyzed in the draft PEA.

c), d) & e) No provision of the proposed rules require the use of public services such as schools, parks or other public facilities. As indicated in the “Population and Housing” discussion, there are no provisions in the proposed rules that would induce population growth, which would require construction of additional schools, parks, or other recreational resources. As a result, it is not expected that the proposed project would cause or require physically altered public facilities. Further, enforcement activities required by PRs 3501 and 3502 would be carried out by SCAQMD inspectors as part of their normal duties. Since no significant adverse impacts are anticipated, this topic will not be further analyzed in the draft PEA.

	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

The impacts to recreation would be considered significant if:

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

DISCUSSION

a) and b) The net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from locomotive idling to the surrounding community. Because the proposed project is not expected to induce or redirect population growth, no provisions of the proposed rules would increase the need for additional parks or other recreational facilities, or cause the deterioration of existing facilities. The proposed rules do not require the development or construction of new recreational facilities or require the expansion of existing recreational facilities, which could have an adverse effect on the environment.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on recreation. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 would be considered significant if the following occur:

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

DISCUSSION

a) The use of control technology might require waste disposal activities and potential impact on landfill capacity. The draft PEA will further examine the potential increase need for solid/hazardous waste services from disposal of spent catalysts, etc.

b) The net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from locomotive idling to the surrounding community. Implementation of the proposed rules would not impede or hinder in any way compliance with any applicable federal, state or local statutes related to solid or hazardous waste disposal.

	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,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

including either an increase in traffic levels or a change in location that results in substantial safety risks?

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| 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"/> |
| 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

The impacts on transportation/traffic would 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 (e.g., 350 heavy-duty truck round-trips per day) 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.

DISCUSSION

(a) & (b) Because PRs 3501 and 3502 affect locomotives which operate on existing rail lines, the proposed project would not increase street traffic or load and capacity of the street system throughout the district, or degrade the level of service ratios on a local or regional level. Similarly, the number of vehicle trips will not increase and the county congestion management plans will not be adversely affected.

c) There are no requirements in the proposed rules which would affect air traffic patterns because the proposed project does not involve transport of any individuals or materials by plane. Further, as noted in the preceding discussion, the proposed rules do not generate an increase in traffic levels or a change in location that results in substantial safety risks to local airports or airstrips.

d), e) & f) There are no provisions in the proposed rules that require construction of design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment) that could create traffic hazards or result in inadequate emergency access, transportation/traffic design features, emergency access, or parking capacity.

Further, the proposed rule would not create an inadequate emergency access situation or inadequate parking capacity situation. There are no requirements in the proposed rule which would affect adopted policies, plans, or programs supporting alternative transportation. The proposed rule is intended to reduce toxic risk, diesel PM10 and other criteria pollutant emissions in the district.

Based on the above discussion, the proposed rule is not expected to generate a substantial number of new vehicle trips and therefore would not have a significant adverse impact on the transportation systems within the district. Since no significant adverse impacts are anticipated, this environmental topic will not be further analyzed in the draft PEA.

	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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?

- 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)
- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

DISCUSSION

(a) In general, the net effect of PRs 3501 and 3502 would be to provide a public health benefit by reducing toxic risk, diesel PM10 and other criteria pollutant emissions from locomotive idling to the surrounding community. However, the proposed project may have adverse secondary air quality impacts from the potential increase in the re-start failure rate and system delays, both potentially resulting in increased number of locomotives needed to move product and, thus, more idling. In addition, the start up of the locomotives could be louder than during existing idling activity. These potential impacts will be evaluated in the Draft PEA to determine if the proposed rules have the potential to adversely affect the environment.

Based on the preceding analyses of “Biological Resources” and “Cultural Resources” impacts, the proposed project will not reduce or eliminate any plant or animal species or destroy prehistoric records of the past. Affected locomotives operate on existing rail lines, which has been previously graded and constructed, such that the proposed project is not expected to extend into environmentally sensitive areas.

(b) The Environmental Checklist indicates that the proposed project has potentially significant adverse impacts on air quality and noise. The potential for project-specific and cumulative impacts on these resources will be evaluated in the draft PEA.

(c) The proposed project may result in secondary emissions and periodic noise levels. The potential for these impacts to have adverse impacts on human beings, either directly or indirectly, will be evaluated in the draft PEA.

APPENDIX A

PROPOSED RULE 3501

APPENDIX B

PROPOSED RULE 3502