South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

SUBJECT: **NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT**

PROJECT TITLE: **PROPOSED AMENDED RULE 1112.1 – EMISSIONS OF PARTICULATE MATTER AND CARBON MONOXIDE FROM CEMENT KILNS**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this Draft Environmental Assessment (EA) which assesses potential environmental impacts that may result from implementing the proposed project identified above pursuant to its certified regulatory program (SCAQMD Rule 110).

This letter, the attached Notice of Completion (NOC) and the attached Draft EA 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. The proposed project's description, location, and potential adverse environmental impacts are described in the attached documents.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis for the proposed project will be accepted during a 30-day public review and comment period beginning Tuesday, July 17, 2007, and ending 5 p.m. on Wednesday, August 15, 2007. **Please send any comments to Ms. Barbara Radlein (c/o Office of Planning, Rule Development, and Area Sources – CEQA Section) at the address shown above**. Comments can also be sent via facsimile to (909) 396-3324 or e-mail at bradlein@aqmd.gov. Ms. Radlein can be reached by calling (909) 396-2716. Please include the name and phone number of the contact person for your agency. Questions regarding the proposed amended rule should be directed to Mr. Henry Pourzand at (909) 396-2414.

The Public Hearing for the proposed project is scheduled for Friday, September 7, 2007. (Note: This public meeting date is subject to change.)

Date: July 13, 2007

Signature: Steve Smith

Title: Steve Smith, Ph.D.
Program Supervisor

Telephone: (909) 396-3054

Reference: California Code of Regulations, Title 14, §§ 15085, 15105, and 15371

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

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:
Draft Environmental Assessment (EA) for Proposed Amended Rule 1112.1 – Emissions of Particulate Matter and Carbon Monoxide from Cement Kilns

Project Location:
South Coast Air Quality Management District: 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:
SCAQMD staff is proposing amendments to Rule 1112.1 – Emissions of Particulate Matter and Carbon Monoxide from Cement Kilns, to: 1) change the averaging time for the 2,000 ppm CO emissions limit from cement kilns to average over a period of three hours in lieu of complying with the Rule 407 (a)(1) averaging time, which is based on a 15 minute averaging period, provided that the combined total of all kiln CO emissions for any calendar year are 50 percent less than the combined total of all reported kiln CO emissions in calendar year 2003; 2) require a Continuous Emissions Monitoring System (CEMS) to be installed by December 31, 2007 on cement kilns for CO and oxygen monitoring and operated in accordance with Rule 218; 3) conduct CEMS certification tests and other sampling, analysis, and reporting by an approved laboratory; and 4) add test methods and approved equivalents for determining CO and PM emissions levels. Other minor changes are proposed for clarity and consistency throughout the rule. The emission reductions of particulate matter achieved by the current version of Rule 1112.1 will not change. However, the proposed amendments will cap emission levels of CO at 50 percent of reported emissions in 2003 should the kiln emissions exceed the 2,000 ppm limit averaged over 15 minutes. Further, altering the sampling period for CO will not exceed the state or federal ambient air quality standards for CO. Therefore, the environmental analysis in the Draft EA concluded that PAR 1112.1 would not generate any significant adverse environmental impacts.

Lead Agency:	**Division:**
South Coast Air Quality Management District	Planning, Rule Development and Area Sources

Draft EA and all supporting documentation are available at:	**or by calling:**	**The Draft EA also be obtained by accessing the SCAQMD's website at:**
SCAQMD Headquarters 21865 Copley Drive Diamond Bar, CA 91765	(909) 396-2039	http://www.aqmd.gov/ceqa/aqmd.html

The Public Notice of Completion is provided through the following:
☑ Los Angeles Times (July 17, 2007) ☑ SCAQMD Website ☑ SCAQMD Mailing List

Draft EA Review Period (30-day):
July 17, 2007 – August 15, 2007

Scheduled Public Meeting Dates (subject to change):
SCAQMD Governing Board Hearing: September 7, 2007, 9:00 a.m.; SCAQMD Headquarters

The proposed project will have NO statewide, regional or areawide significance; therefore, NO scoping meeting is required for the proposed project pursuant to Public Resources Code §21083.9 (a)(2).

Send CEQA Comments to:	**Phone:**	**Email:**	**Fax:**
Ms. Barbara Radlein	(909) 396-2716	bradlein@aqmd.gov	(909) 396-3324

Direct Questions on Proposed Amendments:	**Phone:**	**Email:**	**Fax:**
Mr. Henry Pourzand	(909) 396-2414	hpourzand@aqmd.gov	(909) 396-3324

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment:

Proposed Amended Rule 1112.1 – Emissions of Particulate Matter and Carbon Monoxide from Cement Kilns

SCAQMD No. 0721307BAR

July 13, 2007

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CHAPTER 1 - PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Objective

Project Background

Project Description

INTRODUCTION

Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO2), particulate matter with an aerodynamic diameter of ten microns or less (PM10), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5), sulfur dioxide (SO2) and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards. In addition, the California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977[1] as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin (collectively known as the "district"). By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the district[2]. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP[3]. The Final 2007 AQMP concluded that major reductions in emissions of volatile organic compounds (VOCs), oxides of sulfur (SOx) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone (the key ingredient of smog) and particulate matter (PM10 and PM2.5). Ozone, a criteria pollutant, is formed when VOCs react with NOx in the atmosphere and has been shown to adversely affect human health and to contribute to the formation of PM10 and PM2.5. CO is a colorless, odorless gas formed by the incomplete combustion of fuels. The ambient air quality standard for CO is intended to protect persons whose medical condition already compromises their circulatory systems' ability to deliver oxygen.

Air quality in the area of the SCAQMD's jurisdiction has shown substantial improvement over the last three decades. Nevertheless, some federal and state air quality standards are still exceeded frequently and by a wide margin. Of the National Ambient Air Quality Standards (NAAQS) established for six criteria pollutants (ozone, lead, SO2, NO2, CO, PM10, and PM2.5), the area within the SCAQMD's jurisdiction is only in attainment with SO2, sulfates, NO2, CO, and lead standards. Currently, the SCAQMD exceeds the state attainment thresholds for ozone, PM10, and PM2.5. In 2006, the federal ambient air quality standards were exceeded 86 days for ozone, and 32 days for PM2.5. Also in 2006, the state ambient air quality standards were exceeded 121 days for ozone and 75 days for PM10. In addition, CO was monitored at 25 locations in the district in 2006 and neither the federal nor state eight-hour CO standards were exceeded.

Within SCAQMD's jurisdiction, the process of manufacturing "portland gray cement" (PGC) in cement kilns is unique to one facility, California Portland Cement Company (CPCC). A variety of emissions can be attributed to the operation of cement kilns; however, the main by-products of the cement manufacturing process are NOx, SOx, PM10, PM2.5 and CO. Initially, cement kilns were subject to the particulate matter requirements in SCAQMD's Rule 404: Particulate Matter – Concentration; and Rule 405: Solid Particulate Matter – Weight; to the CO requirements in Rule 407: Liquid and Gaseous Air Contaminants; and, to the NOx and SOx requirements in Regulation XX – Regional Clean Air Incentives Market (RECLAIM). The United States

[1] The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).
[2] Health & Safety Code, §40460 (a).
[3] Health & Safety Code, §40440 (a).

Environmental Protection Agency (EPA) adopted the New Source Performance Standard (NSPS) for particulate emissions from existing cement kilns and clinker coolers in 40 CFR Part 60, Subpart F. Not only did the NSPS supercede SCAQMD requirements for particulate matter, it also was in conflict with Rules 404 and 405. To resolve the inconsistencies between the NSPS and Rules 404 and 405, Rule 1112.1 – Emissions of Particulate Matter From Cement Kilns, was adopted in February 1986 and Rules 404 and 405 were amended for consistency.

Later, with the adoption of the SCAQMD's RECLAIM program in Regulation XX, regulation of the NOx emissions from CPCC's cement kilns plus other ancillary equipment, that were originally regulated by Rule 1112 – Emissions of Oxides of Nitrogen from Cement Kilns, was superseded by and became subject to RECLAIM's annual allocation and reduction requirements. However, during the control of NOx, increased formation of CO can occur. To achieve a balance between reducing the amount produced of these two pollutants, CPCC changed their combustion process and emissions control strategy with the priority to minimize NOx. With recent source testing results and data available for cement kilns, the reports show that while the NOx emissions are being effectively reduced, there were some temporary exceedences or spikes of CO emissions above the 2,000 ppm limit in Rule 407 when averaged over 15 minutes. However, over the course of a year, the annual average of CO emissions remained unaffected.

Though the current version of Rule 1112.1 focuses on the emission requirements for particulate matter, including PM10 and PM2.5, amendments proposed to Rule 1112.1 will include CO emission requirements specific to cement kilns and clinker coolers. Lastly, proposed amended Rule (PAR) 1112.1 will contain new requirements for compliance determinations and test methods.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PAR 1112.1 is a "project" as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the project and has prepared this draft Environmental Assessment (EA) with no significant adverse impacts pursuant to its Certified Regulatory Program. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110, SCAQMD has prepared this Draft EA.

CEQA and Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this Draft EA to address the potential adverse environmental impacts associated with the proposed project. The Draft EA is a public disclosure document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of the proposed project; and, (b) be used as a tool by decision makers to facilitate decision making on the proposed project. SCAQMD's review of the proposed project shows that the project would not have a significant adverse effect on the environment. Therefore, pursuant to CEQA Guidelines §15252, no alternatives or mitigation measures are included in this Draft EA. The analysis in Chapter 2 supports the conclusion of no significant adverse environmental impacts.

PROJECT LOCATION

PAR 1112.1 would affect one facility, California Portland Cement Company (CPCC), which is located at 695 South Rancho Avenue, Colton CA 92324 (San Bernardino County) within SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of the Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

CPCC is bounded by train tracks to the west operated by Union Pacific Railroads, the San Bernardino freeway (I-10) to the north, South Rancho Avenue to the east, and West Agua Mansa Road to the south. CPCC and adjacent properties to the north, east, west and southwest of CPCC are industrial zones. The adjacent property to the south of CPCC is open space that follows the Santa Ana River and is zoned as equestrian/agricultural.

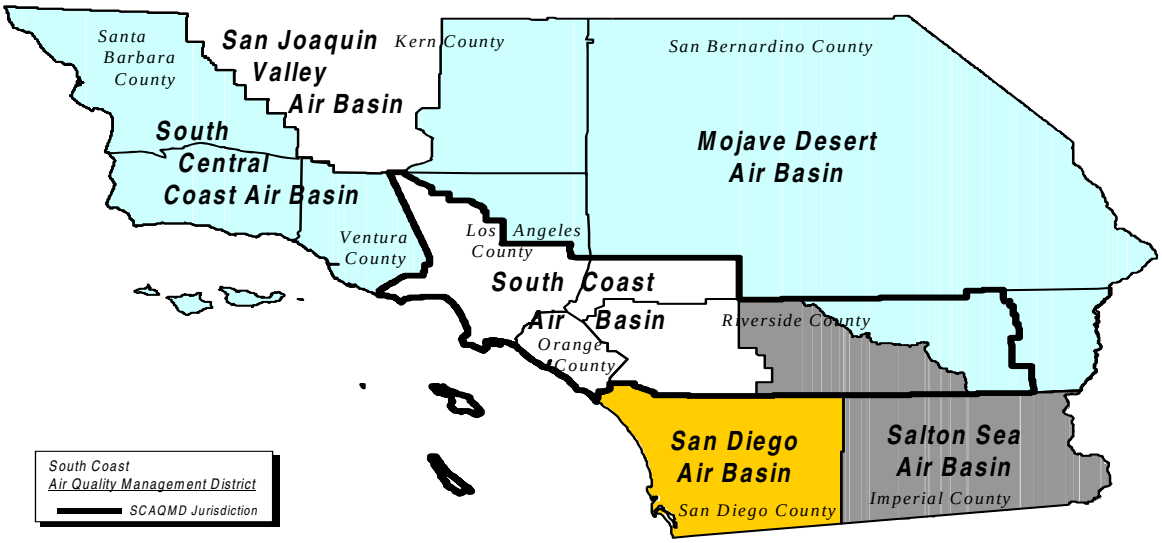

Figure 1-1
Boundaries of the South Coast Air Quality Management District

PROJECT OBJECTIVE

The objectives of PAR 1112.1 are to: 1) balance the emission reductions of NOx and CO by allowing cement kilns more flexibility in complying with the 2,000 ppm CO requirement by increasing the averaging time from 15 minutes to three consecutive hours; 2) ensuring that annual CO emissions do not increase by establishing a 50 percent reduction of annual CO emissions from the year 2003 baseline; 3) ensure compliance with the new CO requirements by requiring the installation of continuous emissions monitoring systems (CEMS); and, 4) provide a methodology for determining compliance with CO and particulate emissions by establishing test methods for those pollutants.

PROJECT BACKGROUND

The process of making PGC begins with the acquisition of raw materials, predominantly limestone rock (calcium carbonate) and clay, which exist naturally in rocks and sediment on the earth's surface. These and other materials used to manufacture cement are mined at nearby quarries and comprise "raw mix." The raw mix is refined by a series of mechanical crushing and grinding operations to segregate and eventually reduce the size of each component to 0.75 inch or smaller before being conveyed to storage. Proprietary proportions of refined limestone, shale, iron oxide, alumina and silicate (from clay) are combined into "kiln feed" and pneumatically fed into a cement kiln. In addition, waste materials or by-products from other industries, such as fly ash, slag, foundry sand, spent catalysts and other manufacturing residues, supply essential ingredients to supplement or adjust the chemistry of the kiln feed.

When the kiln feed enters the cement kiln, a series of chemical reactions occur which result in physical changes that eventually result in the production of hard pellets known as Portland cement clinker (clinker) at the discharge end. Clinker typically contains four major compounds: 1) tricalcium silicate (alite); 2) dicalcium silicate (belite); 3) tricalcium aluminate; and, 4) tetracalcium aluminoferrite. Because clinker is a harder material than any of the quarried products used to prepare the raw mix, it is first grinded and then blended with approximately five percent by weight of gypsum to form the final product, PGC. PGC, when mixed with the correct quantity of water, will set to form concrete. Whatever the blend of materials in the raw mix may be, approximately 1.56 parts kiln feed is necessary to manufacture one part PGC.

A cement kiln is a pyroprocess or high temperature reactor that is constructed along a longitudinal axis with segmented rotating cylinders whose connected length is anywhere from 50 to 200 yards in length as shown in Figure 1-2. Along the length of the kiln, various burners are positioned throughout and the kiln is lined with refractory fire brick to withstand extreme heat and temperature fluctuations. Cement kilns are built at a slight horizontal incline to allow for gravitational flow of the materials as the feed mixture enters at the high end, goes through several chemical reactions and slowly spins across the length of the kiln until it finally discharges clinker at the lower end.

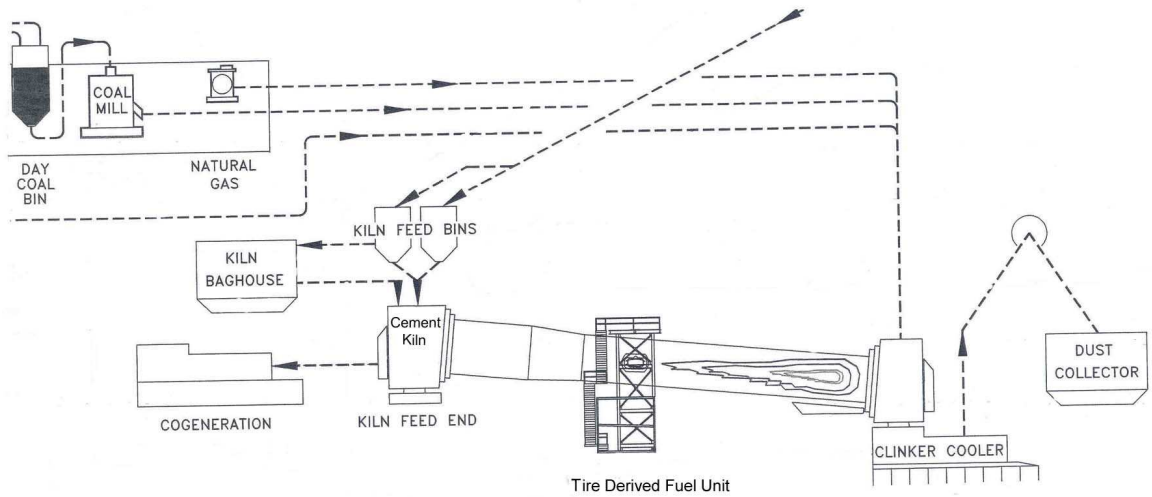

Figure 1-2
Schematic of Cement Kiln[4]

The pyroprocess in the kiln consists of three phases during which clinker is produced from raw materials undergoing physical changes and chemical reactions. The first phase in the kiln, the drying and pre-heating zone, operates at a temperature between 70 ^{o}F and 1650 ^{o}F and evaporates any remaining water in the raw mix of materials entering the kiln. Essentially this is the warm-up phase which stabilizes the temperature of the refractory fire brick inside the mouth opening of the kiln. The second phase, the calcining zone, operates at a temperature between 1100 ^{o}F and 1650 ^{o}F and converts the calcium carbonate from the limestone in the kiln feed into calcium oxide and releases carbon dioxide. During the third phase, the burning zone operates on average at 2200 ^{o}F to 2700 ^{o}F (though the flame temperature can exceed 3400 ^{o}F) during which several reactions and side reactions occur. The first reaction is calcium oxide (produced during the calcining zone) with silicate to form dicalcium silicate and the second reaction is the melting of calcium oxide with alumina and iron oxide to form the liquid phase of the materials. Despite the high temperatures, the constituents of the kiln feed do not combust during pyroprocessing. As the materials move towards the discharge end, the temperature drops and eventually clinker nodules form and volatile constituents, such as sodium, potassium, chlorides, and sulfates, evaporate. Any excess calcium oxide reacts with dicalcium silicate to form tricalcium silicate. The red hot clinker exits the kiln, is cooled in the clinker cooler, passes through a crusher and is conveyed to storage.

The heat energy required to reach the high temperatures necessary to produce cement clinker is supplied to the kiln at various points by burning fuels such as pulverized coal, petroleum coke, oil, natural gas, and used tires. As the raw material feed flows downward through the kiln, burning fuels release NOx and the oxidation of the carbon in the feed mix produces carbon (as soot), CO and CO2 emissions. The flow of these combustion gases moves toward the feed end of the kiln, or, in other words, counter to the direction of the raw material feed.

CPCC operates two gray cement kilns, Kiln #1 and Kiln #2. Due to the varying design and the enormous size of each kiln, different chemical reactions are taking place simultaneously in different zones of each kiln. In addition, the composition of the kiln feed and the temperature can vary unpredictably in each kiln, thus, requiring constant monitoring by the kiln operators.

[4] Figure 1-2 provided by CPCC.

There are several key factors that are known to affect the formation of NOx, CO and CO2 emissions from cement kilns:

1) Heterogeneous chemical composition of the raw feed mix;
2) Heterogeneous chemical composition of tires used in the injection system;
3) The presence of air, especially excess air (as excess oxygen);
4) Varying temperatures in multiple reaction zones within the kilns; and,
5) Uncertain distribution of reaction zones with the kiln.

NOx emissions from kiln reactions are a by-product of mixing air with the fuel to heat up and maintain the temperature within the kiln. Air contains approximately 21 percent oxygen and 79 percent nitrogen. Most of the oxygen in air contributes to the thermal process in the formation of PGC. However, the excess nitrogen present plus elemental carbon produced as a result of combustion will generate both NOx and CO emissions. Unfortunately, reducing the presence of air, in turn, to reduce or mitigate the amount of NOx produced, results in the increased formation of CO produced. Further, in each kiln, two factors, the amount of oxygen present in the kiln and the temperature in the reaction zone of the kiln, influence the proportions of CO to CO2 emissions produced. In general, the more excess oxygen available at the higher kiln temperatures, the more likely that CO will be converted to CO2. For these reasons, the SCAQMD recognizes the need to find the right balance between regulating the NOx and CO emissions from cement kilns and, accordingly, is proposing amendments to Rule 1112.1.

PROJECT DESCRIPTION

The proposed amendments to Rule 1112.1 primarily affect the CO emissions from cement kilns by establishing a CO concentration limit along with an annual emission limit. In addition, PAR 1112.1 would establish compliance procedures for Continuous Emissions Monitoring (CEM) and test methods for measuring CO concentration and quantifying PM emissions. The proposed changes will be in lieu of the emission limit and averaging time for CO found in Rule 407.

The following is a summary of the proposed amendments to Rule 1112.1. Other minor changes are also proposed for clarity and consistency throughout the rule. A copy of PAR 1112.1 can be found in Appendix A.

<u>Subdivision (b) - Requirements</u>

- Limit the CO concentration in the exhaust stream of a cement kiln to 2,000 parts per million (ppm), averaged over 15 minutes as required by Rule 407 (a)(1); or,
- Limit the CO concentration in the exhaust stream of a cement kiln to 2,000 parts per million (ppm), averaged over three consecutive hours and corrected to three percent oxygen (O2) by volume provided that the annual CO emissions do not exceed 50 percent of the annual reported CO emissions in 2003.

<u>Subdivision (c) – Compliance Determination</u>

- Conduct CO measurements, monitoring and recordkeeping for cement kilns in accordance with the procedures in SCAQMD Rule 218 – Continuous Emission Monitoring.
- Require the installation of CEMS to monitor CO and O2 emissions from cement kilns by December 31, 2007, and require the operation of the CEMS to follow the procedures in SCAQMD Rule 218.
- Require CEMS certification tests to be conducted by an approved laboratory pursuant to the District Laboratory Approval Program (LAP), when available.

Subdivision (d) – Test Methods

- Require CO emission concentrations to be determined in accordance with SCAQMD Test Method 100.1.
- Require PM emissions to be determined in accordance with SCAQMD Test Method 5.3.
- Allow for other equivalent test methods to be used provided that they are approved in writing by the EPA, California Air Resources Board (CARB), and SCAQMD.

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

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

GENERAL INFORMATION

Project Title:	Proposed Amended Rule 1112.1 – Emissions of Particulate Matter and Carbon Monoxide From Cement Kilns
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Ms. Barbara Radlein (909) 396-2716
Rule 1112.1 Contact Person	Mr. Henry Pourzand (909) 396-2414
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1112.1 will add new CO limits, CO compliance determination monitoring, and test methods for CO and PM emissions from cement kilns. The proposed changes also include an option to use a three-hour averaging time in lieu of complying the 15-minute averaging time for the emission limit for CO as found in Rule 407 (a)(1), provided that the overall annual CO emissions are less than 50 percent of the 2003 emissions baseline. Only one facility, CPCC, will be affected by PAR 1112.1. CPCC is located at 695 South Rancho Avenue in Colton, California.
Surrounding Land Uses and Setting:	Land uses surrounding the CPCC facility are mostly industrial with the exception of an adjacent property to the south of West Agua Mansa Road that follows the Santa Ana River which is designated as an open space equestrian/agricultural zone. Refer to Chapter 1, Project Location, for a more complete description.
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Agriculture Resources	☑ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Hazards & Hazardous Materials	☐ Hydrology/ Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Solid/Hazardous Waste	☐ Transportation/ Traffic	☑ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☑ I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: July 13, 2007 **Signature:** Steve Smith

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As discussed in Chapter 1, PAR 1112.1 would regulate CO emissions from cement kilns. CPCC is the only facility within SCAQMD's jurisdiction that would be subject to the proposed requirements of PAR 1112.1. Specifically, PAR 1112.1 adds an option that would allow cement kiln operators to comply with the same existing limit of 2,000 ppm CO that is required by Rule 407 (a)(1), but for an averaging time of three hours instead of 15 minutes provided that the overall annual CO emissions are less than 50 percent of the 2003 emissions baseline. Essentially, if the quantity of CO emissions are measured and shown to comply with the existing requirement in Rule 407 (a)(1), the overall annual emissions of CO from CPCC's kilns would not be subject to an annual emissions cap. Under this scenario, there would be no change in CPCC's compliance procedures or day-to-day operations of their cement kilns. This does not mean to say that CPCC's CO emissions would be unlimited because other chemistry limiting factors as well as other SCAQMD Rules and Regulations restricting emissions for other pollutants will drive the overall compliance at the facility.

PAR 1112.1 also provides the option in the event that the CO emissions from CPCC's cement kilns cannot meet the 2,000 ppm limit during a 15-minute averaging time, but can meet the limit over a three-hour averaging time, then CPCC would be subject to at least a 50 percent reduction as an annual cap of CO emissions which is tied to their past Annual Emissions Report submitted in 2003.

The analysis in this Draft EA is based on three key assumptions: 1) CPCC operators have indicated that they intend to choose the three-hour averaging time option for measuring CO concentrations and take the 50 percent CO emission cap from year 2003 baseline; 2) CPCC operators have already demonstrated that the cement kiln has been operating well below 50 percent of the year 2003 baseline for CO emissions; and 3) CPCC operators have already installed CEMS to monitor CO and O2 emissions, no so additional physical changes are expected to result from implementing PAR 1112.1.

Although there are other amendments proposed throughout PAR 1112.1 that pertain to CO compliance determination procedures and CO and PM test methods, plus other administrative changes for continuity and clarity, they are not expected to have an effect on emissions and, thus, will not be addressed further in this Draft EA. Therefore, the effects of implementing the compliance option for measuring CO emissions from cement kilns over a three-hour period will be the main focus of the analysis in this Draft EA.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:			
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑

Significance Criteria

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

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

Discussion

I. a), b), c), & d) As already noted, it is assumed that CPCC will comply with CO control requirements using the three-hour averaging provision. The main effect of PAR 1112.1 would be to regulate CO emissions from cement kilns. PAR 1112.1 would extend the averaging time owners/operators would otherwise have to meet the 2,000 ppm CO limit in Rule 407 (a)(1) (i.e., from 15 minutes to three hours) provided that the annual CO emissions are reduced by 50 percent from 2003 levels. It is expected that CPCC will comply with the 50 percent CO emission reduction from year 2003 levels by limiting operating practices. Thus, no physical changes to CPCC's cement kilns are anticipated as a result of implementing PAR 1112.1.

Because PAR 1112.1 affects existing operating practices at CPCC and since CPCC has already installed CEMS to monitor CO and O2 emissions, it would not result in any new construction of buildings or other structures that would obstruct scenic resources or degrade the existing visual character of a site, including but not limited to, trees, rock outcroppings, or historic buildings. Further, no new additional light or glare would be created which would adversely affect day or nighttime views in the area since no light generating equipment would be required to comply with proposed amended rule and since CPCC is a 24-hour operation with existing light sources in place for nighttime operations.

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

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

Significance Criteria

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

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

Discussion

II. a), b), & c) As discussed previously under "Aesthetics," neither modification of existing structures nor construction of new structures is anticipated to result from implementing PAR 1112.1. Further, the proposed rule amendments will not require any installation of emission control devices. PAR 1112.1 simply provides the option that would allow for additional time for owners/operators of CPCC's cement kilns to average the 2,000 ppm CO emission limit (i.e., three hours instead of 15 minutes) provided that the overall annual emissions are below 50 percent of the reported annual emissions for CO in 2003. To comply with the 50 percent reduction requirement, it is expected that CPCC will reduce or limit operating practices. Moreover, CPCC has already installed CEMS to monitor CO and O2 emissions. Therefore, the proposed project would not result in any construction of new buildings or other structures that would require converting farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. Since PAR 1112.1 would not physically change CPCC's facility or the gray cement kilns, there are no provisions in PAR 1112.1 that would affect land

use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements relative to agricultural resources will be altered by the proposed project.

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

	Potentially Significant Impact	Less Than Significant Impact	No Impact
III. AIR QUALITY. Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☑	☐
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☑	☐
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)?	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☑	☐

Significance Criteria
Potential significant adverse air quality 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.

Discussion
In lieu of complying with the 15 minute averaging time for measuring CO emissions pursuant to Rule 407 (a)(1), PAR 1112.1 would allow for a three-hour averaging time for owners/operators of CPCC's cement kilns to average the 2,000 ppm CO emission limit provided that the overall annual emissions are below 50 percent of the reported annual emissions for CO in 2003.

Table 2-1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants [d]		
NO2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
PM10 24-hour average annual geometric average annual arithmetic mean	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$ 20 $\mu g/m^3$	
PM2.5 24-hour average	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation)	
Sulfate 24-hour average	25 $\mu g/m^3$	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

[a] Source: SCAQMD CEQA Handbook (SCAQMD, 1993)
[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.
[d] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on SCAQMD Rule 403.

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

III. a), b), c), d) & f) Attainment of the state and federal ambient air quality standards protect sensitive receptors and the public in general from the adverse effects of criteria pollutants which are known to have adverse human health effects. The proposed project is located in the Basin, which is in attainment with all state and federal CO ambient air quality standards. The Basin was recently designated by EPA as in attainment with the federal CO standards as of June 12, 2007.

Construction Air Quality Impacts

Increasing the averaging time to three hours from fifteen minutes is an option provided in PAR 1112.1 Compliance with this option means allowing more time to measure the CO concentration to determine if the average 2,000 ppm limit is exceeded. Further, CPCC has indicated that they have already installed CEMS for monitoring CO and O2 emissions. Thus, implementation of PAR 1112.1 does not require physical changes or modifications involving construction activities such that there will be no indirect air quality impacts resulting from the proposed project.

Summary of Operational Air Quality Impacts

Dispersion modeling was performed to assess the potential air quality impacts of the proposed change to PAR 1112.1 that would allow a 2,000 ppm CO limit to be averaged over three hours, instead of 15 minutes. It is important to note that only one facility, CPCC, has two cement kilns that would be affected by the proposed project. CPCC is located in Colton, which is within San Bernardino County.

The EPA dispersion model, ISCST3, was used with a radial receptor grid. Meteorological data at SCAQMD's Riverside meteorological site was used as input to the dispersion model. The worst-case CO air quality occurred during the period from 2004 through 2006 at the San Bernardino monitoring site (Station No. 5203) and for this reason, was assumed to represent background CO air quality. The assumed CO emission rates and stack parameters for the modeling are summarized in Table 2-2. The highest 1-hour CO value over the period from January 1, 2005 to February 1, 2007 from each of the kiln stacks' CEMS was used for the 1-hour emission rates in Table 2-2. The proposed rule limit of 2,000 ppm was assumed for the 8-hour emission rates in Table 2-2.

Table 2-2
CO Emissions and Stack Data Used in the Dispersion Modeling for CPCC

Stack Parameters	Kiln Stack #1	Kiln Stack #2
Stack height (m)	29.6	29.6
Stack diameter (m)	3.5	3.5
Stack temperature (degrees Kelvin)	444.3 – 452.0*	452.0 – 453.7*
Stack gas exit velocity (m/s)	20.5 – 21.9*	13.3 – 29.2*
1-hour CO emission rate (g/s)	10.5	14.0
8-hour CO emission rate (g/s)	8.4	5.4

* Stack temperature and stack gas exit velocity depends on the averaging period (i.e., 1-hour or 8-hour).

The CO modeling results are shown in Table 2-3. Since the project impact area where CPCC is located is in attainment of all state and federal CO ambient air quality standards, the project

increment is added to the worst-case background concentrations and the sum is then compared to the relevant CO standards. As shown in Table 2-3, the total impacts from implementing PAR 1112.1 are well below all state and federal ambient air quality standards for CO.

Table 2-3
CO Dispersion Modeling Results

Averaging Time	Project Increment ($\mu g/m^3$)	Background Air Quality ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	CAAQS ($\mu g/m^3$)	Rule 1303 Significance Thresholds ($\mu g/m^3$)	Significant? (yes/no)
1-hour	66.9	4,600	4,667	40,000	23,000	1,100	**NO**
8-hour	26.8	3,795	3,822	10,000	10,000	500	**NO**

NAAQS = National Ambient Air Quality Standards
CAAQS = California Ambient Air Quality Standards

Based on the foregoing analysis, extending the averaging time for the CO emissions limit from 15 minutes to three hours, will not have a significant effect on attaining the state and federal ambient air quality standards for CO. Further, since the modeling in Table 2-3 shows that the SCAQMD significance thresholds for CO will not be exceeded at the 1-hour and 8-hour averaging times, implementation of PAR 1112.1 at a 3-hour averaging time will not obstruct implementation of the AQMP or achieving its air quality goals.

In addition, if CPCC uses the three-hour averaging time option, PAR 1112.1 would also impose an annual cap of CO emissions from the cement kilns to be below 50 percent of CPCC's annual emissions as reported in 2003. Table 2-4 summarizes CPCC's CO emission history from 2003 through 2006. If CPCC chooses to apply the three-hour averaging time option, the kilns will be subject to an annual emissions cap of CO at 50 percent of the 2003 baseline year, or 4,670 tons per year of CO emissions, an annualized average emission reduction of nearly 13 tons per day. Further, Table 2-4 shows that there has been a substantial decline in CO emissions over the past four years. Therefore, since there is no increase in CO emissions that would result from implementing PAR 1112.1, no significant air quality impacts are expected.

Table 2-4
CPCC's Annual Mass CO Emissions (tons/year)

Reporting Year	Kiln #1	Kiln #1 Reduction*	Kiln #2	Kiln #2 Reduction*	Total Kiln Emissions	Average Reduction*
2003	5,114	-	4,226	-	9,340	-
2004	3,126	39 %	3,037	28 %	6,163	34 %
2005	1,100	79 %	1,132	73 %	2,232	76 %
2006	1,005	80 %	1,269	73 %	2,274	76 %

* The percent (%) reduction in kiln emissions from the 2003 baseline year (rounded to nearest 1%).

Conclusion

Based on the previous discussions, the proposed project would not result in significant adverse air quality impacts. In fact, the proposed project could result in an air quality benefit by imposing an annual cap of 4,670 tons per year of CO emissions (50 percent of the 2003 emissions baseline) if CPCC chooses the three-hour averaging option. Of course, CPCC will

still be required to continue to comply with all other relevant SCAQMD rules and regulations that pertain to their cement kilns, which may include any or all of the following: prohibitory rules (Regulation IV); toxic rules (Regulation XIV); New Source Review (Regulation XIII); RECLAIM (Regulation XX), and Title V (Regulation XXX). As such, the proposal would not diminish an existing air quality rule or future compliance requirement, nor conflict with or obstruct implementation of the applicable air quality plan. The proposal has no provision that would cause a violation of any air quality standard or directly contribute to an existing or projected air quality violation. Since air quality impacts from implementing PAR 1112.1 do not exceed any air quality significance thresholds (Table 2-1), air quality impacts are not considered to be cumulatively considerable as defined in CEQA Guidelines §15065(c). Therefore, the proposed project is not expected to result in a cumulatively considerable net increase of any criteria pollutant. As a result, the proposed project is not expected to generate significant adverse cumulative air quality impacts.

III.d) CPCC is not expected to expose sensitive receptors to substantial pollutant concentrations from the implementation of PAR 1112.1 for the following reasons: 1) CPCC is an existing facility that is located in an industrial area; 2) there are no operational CO emission increases associated with the proposed changes; 3) the CO concentrations when averaged over a period of three hours do not exceed the state or federal ambient air quality standards; 4) CPCC's operational data has shown a trend of CO emission reductions over the past four years; and, 5) in order to use the three-hour averaging provision, CPCC must limit annual CO emissions to less than 50 percent of the 2003 baseline year. Therefore, significant adverse air quality impacts to sensitive receptors are not expected from implementing PAR 1112.1.

III.e) Historically, the SCAQMD has enforced odor nuisance complaints through SCAQMD Rule 402 - Nuisance. CPCC is not expected to create objectionable odors affecting a substantial number of people for the following reasons: 1) CPCC is an existing facility located in an industrial area with appropriate controls in place; and 2) no changes to the day-to-day operations of CPCC's cement kilns are expected that could cause an increase in odors beyond their existing baseline. Therefore, no significant additional odor impacts are expected to result from implementing the proposed amendments.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑
e)	Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☑
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?	☐	☐	☑

Significance Criteria

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

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

Discussion

IV. a), b), c), & d) PAR 1112.1 will primarily affect the averaging time for the allowable CO emission standard for cement kilns at the existing CPCC facility by increasing it from 15 minutes to three hours provided that the overall annual CO emissions stay below 50 percent of the 2003 baseline. Compliance with PAR 1112.1 will not worsen the current operations at CPCC's facility or worsen present conditions of plant and animal life. PAR 1112.1 does not require

acquisition of additional land or further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found.

Since PAR 1112.1 will not require the installation of emission control devices and since CPCC has already installed CEMS to monitor CO and O2 emissions, no construction activities or construction of new structures are expected from implementing the proposed project. The proposed project would only affect CPCC's two existing cement kilns located at their facility in Colton, California. This facility is located in an industrial area, which has already been greatly disturbed. In general, this area currently does not support riparian habitat, federally protected wetlands, or migratory corridors. Additionally, special status plants, animals, or natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service are not expected to be found within close proximity to CPCC. Therefore, the proposed project would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction.

The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions. A conclusion in the Final Program Environmental Impact Report (EIR) for the 2007 AQMP was that population growth in the region would have greater adverse effects on plant species and wildlife dispersal or migration corridors in the basin than SCAQMD regulatory activities, (e.g., air quality control measures or regulations). The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions.

IV. e) & f) The proposed project is not envisioned to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because it will only affect CPCC's existing facility located in an industrial area. For this reason, effects outside the boundaries of CPCC are not anticipated. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. Additionally, the proposed project will not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because all activities associated with complying with PAR 1112.1 will occur at CPCC's existing industrial facility.

The SCAQMD, as the Lead Agency for the proposed project, has found that, when considering the record as a whole, there is no evidence that the proposed project will have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends. Accordingly, based upon the preceding information, the SCAQMD has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in §753.5 (d), Title 14 of the California Code of Regulations. Further, in accordance with this conclusion, the SCAQMD believes that this proposed project qualifies for the no effect determination pursuant to Fish and Game Code §711.4 (c).

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

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

Significance Criteria

Impacts to cultural resources will be considered significant if:

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

Discussion

V. a) There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. Since no construction-related activities associated with the implementation of PAR 1112.1 are expected, no impacts to historical resources are expected to occur as a result of implementing the proposed project.

V. b), c), & d) Implementation of PAR 1112.1 does not entail any construction activities such as installing add-on controls and other associated equipment to comply with the proposed project. Further, CPCC has already installed CEMS to monitor CO and O2 emissions. Thus, implementation of PAR 1112.1 will not require disturbance of previously disturbed areas at CPCC. Since no construction-related activities are expected, PAR 1112.1 is not expected to require physical changes to the environment that could disturb paleontological or archaeological resources. Therefore, the proposed project has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly destroy a unique paleontological

resource or site or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries. Finally, because the proposed project does not require construction activities, it is unlikely that the proposed project would disturb any human remains, including those interred outside formal cemeteries that would require contacting the county coroner or the Native American Heritage Commission. The proposed project is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources in the district.

Based upon these considerations, significant adverse cultural resources impacts are not expected from implementing PAR 1112.1 and will not be further assessed in this Draft EA. Since no significant cultural resources impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

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

Discussion

VI. a) & e) The proposed project is not subject to any existing energy conservation plans. Further, the proposed project will not require construction activities and the operation activities

will not change the current energy use at CPCC; thus, the proposed project will not utilize energy resources in a wasteful or inefficient manner.

The primary effect of implementing PAR 1112.1 is the change in the emission limits, annual emissions, and allowable averaging times for measuring CO emissions from cement kilns at CPCC. As a result, PAR 1112.1 would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner, or result in the need for new or substantially altered power or natural gas systems. Since PAR 1112.1 would only affect one existing facility (CPCC), it will not conflict with adopted energy conservation plans. Additionally, CPCC is expected to conserve energy (natural gas) and minimize operating costs because they will be expected to limit operations to comply with the requirement to reduce the year 2003 baseline by 50 percent.

VI. b), c) & d. Implementation of PAR 1112.1 will not result in the need for new or substantially altered power or natural gas utility systems. Effects of the proposed project on the electricity capacity are not expected to change from the existing setting because the two affected cement kilns currently operate 24 hours per day, seven days per week. However, CPCC is expected to conserve energy (natural gas) and minimize operating costs because they will be expected to limit operations to comply with the requirement to reduce the year 2003 baseline by 50 percent. Thus, no significant adverse impacts on peak or base demands for electricity or natural are anticipated.

Based upon these considerations, significant adverse impacts to energy are not expected from implementation of PAR 1112.1 and will not be evaluated further in this Draft EA. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☑
• 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?	☐	☐	☑
• Strong seismic ground shaking?	☐	☐	☑
• Seismic–related ground failure, including liquefaction?	☐	☐	☑
• Landslides?	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑

Significance Criteria

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

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

Discussion

VII. a) Because southern California is an area of known seismic activity, existing facilities are expected to conform with the Uniform Building Code and all other applicable state and local building codes. 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.

Compliance with the proposed CO emission limits in PAR 1112.1 will not expose people to substantial geological effects greater than what they are exposed to already at CPCC's cement manufacturing facility. Since CPCC has already installed CEMS to monitor CO and O2 emissions, compliance with PAR 1112.1 will not require any physical modifications that would involve construction activities. Thus, the proposed project will not expose people or structures to risks of loss, injury, or death involving: rupture of an earthquake fault, seismic ground shaking, ground failure or landslides.

VII. b) Since the primary effect of PAR 1112.1 is a change in the emission limit and averaging times for CO emissions, which will not require construction activities (e.g., grading, trenching, refilling and repaving), no potential impacts to existing geophysical conditions are anticipated and no soil will be disrupted as part of complying with PAR 1112.1. Therefore, no soil erosion or loss of topsoil, unstable earth conditions or changes in geologic substructures are expected to occur at CPCC as a result of implementing the proposed project.

VII. c) Since the proposed project will affect CPCC, an existing facility located in an industrial area, it is expected that the soil types present at CPCC will not be further susceptible to expansion or liquefaction as a result of implementing PAR 1112.1. Furthermore, subsidence is not anticipated to be a problem since no excavation, grading, or filling activities are expected occur at CPCC. Additionally, the site where CPCC is located is not envisioned to be prone to landslides or have unique geologic features since CPCC is located in a relatively flat are which is zoned as an industrial area.

VII. d) & e) Since PAR 1112.1 will only affect one facility, CPCC, which is located in an industrial area, it is expected that people or property will not be exposed to expansive soils or soils incapable of supporting water disposal. Though CPCC has some degree of existing wastewater treatment system that will continue to be used, this system will be unaffected by the proposed project. Further, a sewer system is available to handle any wastewater produced and treated by CPCC. PAR 1112.1 does not require the installation of septic tanks or alternative wastewater disposal systems at CPCC. As a result, PAR 1112.1 will not require CPCC's operators to utilize a septic system or alternative wastewater disposal system. Thus, the proposed project will not adversely affect soils associated with a septic system or alternative wastewater disposal system.

Based upon these considerations, significant geology and soils impacts are not expected from the implementation of PAR 1112.1 and will not be further analyzed in this Draft EA. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous materials?	☐	☐	☑
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?	☐	☐	☑
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑
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?	☐	☐	☑

	Potentially Significant Impact	Less Than Significant Impact	No Impact
i) Significantly increased fire hazard in areas with flammable materials?	☐	☐	☑

Significance Criteria

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

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

Discussion

As previously discussed in the "Air Quality" section, the change in averaging time for complying with the 2,000 ppm CO emission limit for cement kilns at a Portland cement manufacturing facility has no potential to create new health hazards. The changes would merely establish annual CO limits and change averaging times at levels which would allow the continued operation of the existing Portland cement manufacturing facility. There would be no change in the existing Portland cement manufacturing operations to comply with the requirements in PAR 1112.1.

VIII.a) Since PAR 1112.1 proposes to change averaging time for the allowable CO emission limit and impose an annual cap for cement kilns, it is assumed that there will be no increase in potential truck trips in response to PAR 1112.1. Implementation of PAR 1112.1 is not expected to increase any existing hazard that the routine transport, use, or disposal of Portland cement manufacturing materials used may have or lead to a reasonably foreseeable accident involving the release of hazardous air pollutants into the environment.

VIII.b) & i) Since the Portland cement manufacturing activities occur at CPCC, which is an existing industrial facility, existing emergency planning is anticipated to adequately minimize the risk associated with materials used in the cement manufacturing process. PAR 1112.1 would not change the type or quantity of materials used to manufacture Portland cement at the existing facility. In general, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against potential risk of upset.

The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems,

electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations.

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

VIII.c), e), & f) In general, the purpose of PAR 1112.1 is to provide an option to extend the averaging time for measuring CO emissions provided that an annual CO emissions cap is also imposed at 50 percent of the annual emissions reported in 2003. By establishing an annual CO emissions cap for cement kilns operating at CPCC, ultimately air quality will be improved and adverse human health impacts related to poor air quality will be reduced. Since the Portland cement manufacturing activities occur at CPCC, an existing industrial facility, implementation of PAR 1112.1 is not expected to increase or create any new hazardous emissions which would adversely affect existing/proposed schools or public/private airports located in close proximity to the affected facility. Accordingly, these impact issues are not further evaluated in this Draft EA.

VIII.d) Even if CPCC is designated pursuant to Government Code §65962.5 as a large quantity generator of hazardous waste, it is not anticipated that complying with PAR 1112.1 will alter in any way how the affected facility manages their hazardous wastes and that they will continue to be managed in accordance with all applicable federal, state, and local rules and regulations.

VIII.g) It should be noted that the proposed amended rule has no provisions that dictate the use or affect a change in the use of any specific material. Therefore, it is not anticipated that PAR 1112.1 would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

In addition, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
- Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
- Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
- Procedures to notify the necessary persons who can respond to an emergency within the facility;
- Details of evacuation plans and procedures;

- Descriptions of the emergency equipment available in the facility;
- Identification of local emergency medical assistance; and
- Training (initial and refresher) programs for employees in:
    1. The safe handling of hazardous materials used by the business;
    2. Methods of working with the local public emergency response agencies;
    3. The use of emergency response resources under control of the handler;
    4. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. As already noted, the proposed project would not change any existing operating practices at CPCC that would require modifying its business emergency response plan.

VIII.h) PAR 1112.1 affects one facility, CPCC, which is located on an existing industrial site in an urban area where wildlands are not prevalent, risk of loss or injury associated with wildland fires is not expected. Accordingly, this impact issue is not further evaluated in this Draft EA.

Based upon these considerations, significant hazards and hazardous materials impacts are not expected from the implementation of PAR 1112.1 and will not be further analyzed in this Draft EA. Since no significant hazards and hazardous materials impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:			
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☑
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)?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	☐	☐	☑
d)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?	☐	☐	☑
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?	☐	☐	☑
f)	Otherwise substantially degrade water quality?	☐	☐	☑
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?	☐	☐	☑
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flaws?	☐	☐	☑
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?	☐	☐	☑
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☑
k)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☑
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?	☐	☐	☑

	Potentially Significant Impact	Less Than Significant Impact	No Impact
m) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑
n) Have sufficient water supplies available to serve the project from existing entitlements 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 will be considered significant if any of the following criteria apply:

Water Quality:

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

Water Demand:

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

Discussion

IX. a), b), f), n) & o) The primary effect of PAR 1112.1 is an optional change in the averaging times for measuring CO emissions and imposing an annual emission cap for CO, neither of which will not require construction activities such as the installation of emission control devices. Thus, PAR 1112.1 will have no direct or indirect impact on hydrology and water quality because

the cement manufacturing process that relates to the cement kilns does not involve the use of water. Therefore, PAR 1112.1 will not adversely affect water resources, water quality standards, groundwater supplies, water quality degradation, existing water supplies or wastewater treatment facilities.

IX. c), d), & e) The primary effect of PAR 1112.1 is an optional change in the averaging times for measuring CO emissions and imposing an annual emission cap for CO. Consequently, no construction activities will be necessary to comply with PAR 1112.1, so watering for fugitive dust control pursuant to Rule 403 is not necessary. Since PAR 1112.1 does not involve construction activities, no changes to storm water runoff, drainage patterns, groundwater characteristics, or flow are expected. Further, implementation of PAR 1112.1 will occur at an existing facility, that is located in an industrial area that is paved and the drainage infrastructures are already in place. As a result, PAR 1112.1 will not alter any existing drainage patterns, increase the rate or amount of surface runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

IX. g) & h) PAR 1112.1 does not involve construction activities of any kind, including those associated with building housing, so it will not result in placing housing in a 100-year flood hazard areas that could create new flood hazards. The proposed project would primarily affect the averaging time for complying with the CO emission standard of gray cement kilns at CPCC, so any flood hazards at this facility would be part of the existing setting.

IX. i) & j) Since the main focus of PAR 1112.1 is to allow a three-hour averaging time for complying with the 2,000 ppm CO emission limit for cement kilns, no new facilities are expected to be constructed as part of the proposed project. Further, CPCC is not located near any large bodies of water so seiches and tsunamis are not an existing hazard. Moreover, the area where CPCC is located is relatively flat , so hazards from mudflows are not an existing hazard. Thus, no flood risks or risks from seiches, tsunamis or mudflow conditions will result from the implementation of PAR 1112.1.

IX. k) Because the existing cement kilns subject to PAR 1112.1 do not utilize water for their operations, no changes to any existing wastewater treatment permits would be necessary. As a result, the proposed project is not expected to affect CPCC's ability to comply with existing wastewater treatment requirements or conditions from any applicable Regional Water Quality Control Board or local sanitation district.

IX. l) & m) Because the cement kilns subject to PAR 1112.1 do not utilize water for their operations or for their emissions control equipment or processes, no increase in wastewater that could exceed the capacity of existing stormwater drainage system or require the construction of a new wastewater or stormwater drainage facility would be expected as a result of complying with the proposed project.

Based upon these considerations, significant hydrology and water quality impacts are not expected from the implementation of PAR 1112.1 and will not be further analyzed in this Draft EA. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:			
a) Physically divide an established community?	☐	☐	☑
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?	☐	☐	☑
c) Conflict with any applicable habitat conservation or natural community conservation plan?	☐	☐	☑

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

Discussion
X. a) Since PAR 1112.1 affects cement kilns at an existing facility and does not involve any construction activities such as building new structures, the proposed project will not create divisions in any existing communities.

X. b) & c) There are no provisions in PAR 1112.1 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. Further, PAR 1112.1 only affects one existing facility, CPCC. The proposed project, however, will not require any changes to local zoning plans or ordinances. Operations of the cement kilns at CPCC would still be expected to comply, and not interfere, with any applicable land use plans, zoning ordinances, habitat conservation or natural community conservation plans.

Based upon these considerations, significant land use and planning impacts are not expected from the implementation of PAR 1112.1 and will not be further analyzed in this Draft EA. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☑

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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?	☐	☐	☑

Significance Criteria

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

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

Discussion

XI. a) & b) There are no provisions in PAR 1112.1 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Based upon these considerations, significant mineral resources impacts are not expected from the implementation of PAR 1112.1 and will not be further analyzed in this Draft EA. Since no significant mineral resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑
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?	☐	☐	☑
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?	☐	☐	☑

Significance Criteria

Impacts on noise will be considered significant if:

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

Discussion

XII. a), b), c), & d) Operation of cement kilns typically results in the generation of a certain amount of noise. However, it is expected that CPCC currently operates its kilns in compliance with all existing noise control laws or ordinances. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA (Cal/OSHA) have established noise standards to protect worker health. Since PAR 1112.1 primarily affects the averaging time for measuring compliance with the 2,000 ppm CO emission limit, the noise level is not expected to change as result of implementing PAR 1112.1. Therefore, implementation of PAR 1112.1 will not generate additional or new noise, excessive groundborne vibration, or substantially increase ambient noise levels beyond existing levels.

XII. e) & f) CPCC is not located at a site that is within an airport land use plan, or within two miles of a public airport; thus, implementation of PAR 1112.1 would not expose people residing or working in the project area to the same degree of excessive noise levels associated with airplanes. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. Further, no change in operations to the affected cement kilns will result from implementing PAR 1112.1 such that there would be no change to the existing noise setting at CPCC's facility.

Based upon these considerations, significant noise impacts are not expected from the implementation of PAR 1112.1 and are not further evaluated in this Draft EA. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

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

Discussion

XIII. a), b) & c) Human population in the SCAQMD's jurisdiction is anticipated to grow regardless of implementing PAR 1112.1. PAR 1112.1 primarily affects the averaging time for measuring compliance with the 2,000 ppm CO emission limit. No component of PAR 1112.1 will require additional employees since no physical changes (i.e., construction) to the existing cement kilns will be required. Similarly, additional employees would not be required during operation because the proposed project will have little effect on the current or future day-to-day operations of the kilns. District population will not be affected directly or indirectly as a result of

adopting and implementing PAR 1112.1. Further, PAR 1112.1 will not indirectly induce growth in the area of CPCC's facility. The construction of single- or multiple-family housing units would not be required as a result of implementing the proposed project since no new employees will be required at CPCC. The proposed project will not require relocation of the cement kilns or the CPCC facility, so existing housing or populations in the district are not anticipated to be displaced necessitating the construction of replacement housing elsewhere. As a result, the proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the district or population distribution.

Based upon these considerations, significant population and housing impacts are not expected from the implementation of PAR 1112.1 and are not further evaluated in this Draft EA. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

Discussion

XIV. a) & b) Although CPCC would be able to adjust the CO emissions averaging time as a result of PAR 1112.1, if adopted, the overall amount of CO emissions generated over current levels is not expected to change to the extent that would increase the chances for fires or explosions. Furthermore, additional inspections at CPCC that would be associated with the

change to the CO emissions requirements by city building departments or local fire departments are not expected. Finally, PAR 1112.1 is not expected to have any adverse effects on local police departments because enforcement of the rule will be the responsibility of the SCAQMD.

Further, PAR 1112.1 will not require the use of acutely hazardous materials to comply with the proposed requirements. As a result, no new fire hazards or increased use of hazardous materials would be introduced at CPCC that would require emergency responders such as police or fire departments. Thus, no new demands for fire or police protection are expected from PAR 1112.1 since the proposed rule amendments will not require construction activities such as the installation of emission control devices.

XIV. c) & d) As noted in the "Population and Housing" discussion, implementation of the proposed project will not require new employees for construction because no construction activities would be necessary to comply with the proposed CO emission limits in PAR 1112.1. Similarly, no new employees will be required to maintain operation of the existing kilns. As a result, PAR 1112.1 will have no direct or indirect effects on population growth in the district. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

XIV. e) The proposed project provides an option to increase the averaging time allowed for measuring the quantity of CO emissions from the cement kilns at CPCC's facility provided that the facility take an annual CO emissions cap at 50 percent of their 2003 reported emissions. Because the proposed project does not involve construction activities that would require new or altered permits, besides altering permit conditions which would be handled by SCAQMD staff, implementation of PAR 1112.1 will not trigger a need for additional government services. Further, the proposed project would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population and, therefore, no need for physically altered government facilities.

Based upon these considerations, significant public services impacts are not expected from the implementation of PAR 1112.1 and are not further evaluated in this Draft EA. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☑

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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?	☐	☐	☑

Significance Criteria
Impacts to recreation will be considered significant if:
- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely effects existing recreational opportunities.

Discussion
XV. a) & b) As previously discussed under "Land Use," there are no provisions in PAR 1112.1 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposed project. Further, implementation of PAR 1112.1 would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment because the proposed project is not expected to induce population growth.

Based upon these considerations, significant recreation impacts are not expected from the implementation of PAR 1112.1 and are not further evaluated in this Draft EA. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

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

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

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

Discussion

XVI. a) The proposed amendments would merely allow for an optional change to the averaging time for measuring CO emissions instead of the original CO requirements in Rule 407 (a)(1). As a result, no change in the amount or character of solid or hazardous waste streams is expected to occur. Since PAR 1112.1 will not require any construction activities or installation of emission control devices, implementation of the proposed project will not change the affected facilities' current solid waste disposal needs.

XVI. b) Implementing PAR 1112.1 is not expected to hinder in any way CPCC's ability to comply with existing federal, state, and local regulations related to solid and hazardous wastes. Consequently, it is anticipated that CPCC owner/operator would continue to comply with federal, state, and local statutes and regulations related to solid and hazardous waste handling and disposal.

Based upon these considerations, PAR 1112.1 is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity. Further, implementing PAR 1112.1 is not expected to interfere with CPCC's ability to comply with applicable local, state, or federal waste disposal regulations. Since no solid/hazardous waste impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC. Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☑

		Potentially Significant Impact	Less Than Significant Impact	No Impact
d)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☑
e)	Result in inadequate emergency access or?	☐	☐	☑
f)	Result in inadequate parking capacity?	☐	☐	☑
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☑

Significance Criteria

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

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

Discussion

XVII. a), b) & f) As noted in the "Discussion" sections of other environmental topics, compliance with PAR 1112.1 is not expected to require construction activities or the installation of control equipment. Since implementation of PAR 1112.1 will not require the installation of emission control devices, PAR 1112.1 will not require additional deliveries of equipment or other construction materials or transport for construction workers. Since PAR 1112.1 will provide an option that would allow an increase in the averaging time for complying with the 2,000 ppm CO emission limit to three hours, the work force at CPCC is not expected to change so there will be no potential for new employee-related trips.

XVII. c) CPCC is not 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. Thus, any actions that would be taken to comply with the proposed project are not expected to influence or affect air traffic

patterns or navigable air space. Thus, PAR 1112.1 would not result in a change in air traffic patterns including an increase in traffic levels or a change in location that results in substantial safety risks.

XVII. d) & e) Since PAR 1112.1 will not require construction or the installation of emission control devices, the proposed project would not substantially change the way the cement kilns will operate. Further, the proposed project does not involve construction of any roadways or other transportation design features, so there would be no change to current roadway designs that could increase traffic hazards. The siting of CPCC is consistent with surrounding land uses and traffic/circulation in the surrounding areas of the cement manufacturing facility. Thus, the proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to CPCC. Emergency access at CPCC is not expected to be impacted by the proposed project and CPCC is expected to continue to maintain their existing emergency access gates. Since PAR 1112.1 does not involve any construction activities, the proposed project is not expected to alter the existing long-term circulation patterns. The proposed project is not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur

XVII. g) CPCC would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation (e.g. bicycles or buses). Since PAR 1112.1 will not require any construction such as the installation of emission control devices, PAR 1112.1 will not hinder compliance with any applicable alternative transportation plans or policies.

Based upon these considerations, PAR 1112.1 is not expected to generate significant adverse transportation/traffic impacts and, therefore, this topic will not be considered further in this Draft EA. Since no significant transportation/traffic impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☑

	Potentially Significant Impact	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☑
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑

Discussion

XVIII. a) As discussed in the "Biological Resources" section, PAR 1112.1 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the two existing cement kilns are located entirely within the boundaries of CPCC's cement manufacturing facility which is in an industrial area that has already been greatly disturbed and that currently does not support any species of concern or the habitat on which they rely. PAR 1112.1 is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The CPCC site is an existing facility, which has been previously graded, such that PAR 1112.1 is not expected to extend into environmentally sensitive areas.

XVIII. b) Based on the foregoing analyses, since PAR 1112.1 will not result in significant adverse project-specific environmental impacts, it is not expected to cause cumulative impacts in conjunction with other projects that may occur concurrently with or subsequent to the proposed project. Furthermore, potential adverse impacts from implementing PAR 1112.1 will not be "cumulatively considerable" because there are no impacts and there will be no contribution to a significant cumulative impact caused by other projects that would exist in absence of the proposed project. Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by the proposed project.

XVIII. c) Based on the foregoing analyses, PAR 1112.1 is not expected to cause adverse effects on human beings. Significant adverse air quality impacts are not expected from the implementation of PAR 1112.1. As a result of the proposed amendments to PAR 1112.1, the direct impact to the cement kilns could be an optional increase in the averaging time measured for complying with the 2,000 ppm CO emission limit provided that CPCC takes an annual CO emissions cap for the kilns at 50 percent of their 2003 reported emission levels. As discussed in the "Air Quality" section, despite this increase in averaging time, there will be no increase in the overall CO emissions from these kilns. No other criteria pollutants are affected by the proposal. No impacts to aesthetics, agricultural resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use/planning, solid/hazardous waste, mineral resources, noise, population and housing, public

services, recreation, and transportation/traffic are expected as a result of the implementation of PAR 1112.1. Therefore, these environmental topics will not be further analyzed in this Draft EA.

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

APPENDIX A

PROPOSED AMENDED RULE 1112.1