



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

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

**PROJECT TITLE: PROPOSED RULE 1153.1 – EMISSIONS OF OXIDES OF
NITROGEN FROM FOOD OVENS**

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

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

Comments focusing on issues relative to the environmental analysis for the proposed project should be sent to Mr. Jeffrey Inabinet (c/o Planning - CEQA) at the above address, by fax to (909) 396-3324, or by email to jinabinet@aqmd.gov. Comments must be received no later than 5:00 p.m. on May 28, 2014. Please include the name, phone number, and email address of the contact person for your organization, if applicable. Questions on the proposed rule should be directed to Mr. Wayne Barcikowski by calling (909) 396-3077 or by sending an email to wbarcikowski@aqmd.gov.

The Public Hearing for the proposed rule is scheduled for September 5, 2014. (Note: Public meeting dates are subject to change).

Date: April 25, 2014

Signature: _____

A handwritten signature in blue ink that reads "Michael Krause".

Michael Krause
Program Supervisor, CEQA
Planning, Rule Development and Area
Sources

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4178

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Draft Environmental Assessment for Proposed Rule 1153.1 – Emissions of Oxides of Nitrogen from Food Ovens

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project:

SCAQMD staff is proposing to adopt Rule 1153.1 – Emissions of Oxides of Nitrogen from Food Ovens. If adopted, Proposed Rule (PR) 1153.1 would limit emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) from the combustion of gaseous and liquid fuels in food ovens, roasters and smokehouses. This equipment is currently regulated by SCAQMD Rule 1147 – NO_x Reductions from Miscellaneous Sources and Regulation XIII – New Source Review (NSR). Rule 1147 limits emissions of NO_x from gaseous and liquid fuel fired combustion equipment that are not specifically addressed in other SCAQMD Regulation XI – Source Specific Standards. However, because control technologies have not matured in a timely manner for commercial food ovens, SCAQMD staff proposed to regulate these sources separately from the other Rule 1147 sources. Under a separate regulation, the commercial food ovens would be placed on a more suitable compliance schedule with achievable emission limitations. Impacts to any adversely affected environmental areas will be further analyzed in the Draft Environmental Assessment.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

Initial Study and all supporting documentation are available at:

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

or by calling:

(909) 396-2039

or by accessing the SCAQMD's website at:

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

The Public Notice of Preparation is provided through the following:

Los Angeles Times (April 29, 2014) SCAQMD Website SCAQMD Mailing List

Initial Study 30-day Review Period:

April 29, 2014 – May 28, 2014

The proposed project may have statewide, regional or areawide significance; therefore, a CEQA scoping meeting was held on April 2, 2014 at SCAQMD Headquarters (pursuant to Public Resources Code §21083.9 (a)(2)). A second scoping meeting is scheduled for May 14, 2014 during the comment period for the NOP/IS.

Scheduled Public Meeting Dates (subject to change):

SCAQMD Governing Board Hearing: September 5, 2014, 9:00 a.m.; SCAQMD Headquarters

Send CEQA Comments to:

Mr. Jeffrey Inabinet

Phone:

(909) 396-2453

Email:

jinabinet@aqmd.gov

Fax:

(909) 396-3324

Direct Questions on Proposed Rule:

Mr. Wayne Barcikowski

Phone:

(909) 396-3077

Email:

wbarcikowski@aqmd.gov

Fax:

(909) 396-3324

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

CHAIRMAN: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

VICE CHAIR: DENNIS YATES
Mayor, Chino
City of San Bernardino

MEMBERS:

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

BEN BENOIT
Councilmember, Wildomar
Cities of Riverside County

JOHN J. BENOIT
Supervisor, Fourth District
County of Riverside

MICHAEL A. CACCIOTTI
Councilmember, South Pasadena
Cities of Los Angeles County/Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
County of San Bernardino

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDITH MITCHELL
Mayor Pro Tem, Rolling Hills Estates
Cities of Los Angeles County/Western Region

SHAWN NELSON
Supervisor, Fourth District
County of Orange

DR. CLARK E. PARKER, SR.
Senate Rules Committee Appointee

JAN PERRY
Councilmember, Ninth District
City of Los Angeles

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

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

TABLE OF CONTENTS

CHAPTER 1 – PROJECT DESCRIPTION

Introduction.....	1-1
Affected Facilities.....	1-2
California Environmental Quality Act.....	1-2
Project Location.....	1-3
Project Background	1-4
Technology Overview and Assessment	1-5
Project Description	1-9
Alternatives.....	1-10

CHAPTER 2 – ENVIRONMENTAL CHECKLIST

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

FIGURES

Figure 1-1 – Boundaries of the South Coast Air Quality Management District	1-3
Figure 1-2 – Pipe Burner	1-5
Figure 1-3 – Ribbon Burner Pipe and Flame Holding Surface	1-6
Figure 1-4 – Ribbon Burner Pipe and Flame Holding Surface	1-6
Figure 1-5 – Proposed Rule 1153.1 Compliance Schedule	1-9

TABLES

Table 1-1 – NO _x Emission Limit	1-10
Table 1-2 – Compliance Schedule for In-Use Units.....	1-10

APPENDIX A: Proposed Rule 1153.1 – Emissions of Oxides of Nitrogen from Food Ovens

CHAPTER 1 - PROJECT DESCRIPTION

Introduction

Affected Facilities

California Environmental Quality Act

Project Location

Project Background

Technology Overview and Assessment

Project Description

Alternatives

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin referred to herein as the District. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with the national ambient air quality standards (NAAQS) for the district.² Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP.³ The 2012 AQMP concluded that major reductions in emissions of particulate matter (PM), oxides of sulfur (SOx) and oxides of nitrogen (NOx) are necessary to attain the state and national ambient air quality standards for ozone, and particulate matter with an aerodynamic diameter of 2.5 microns or less (PM2.5). More emphasis is placed on NOx and SOx emission reductions because they provide greater ozone and PM emission reduction benefits than volatile organic compound (VOC) emission reductions. VOC emission reductions, along with NOx emission reductions, continue to be necessary, because emission reductions of both of these ozone precursors are necessary to meet the ozone standards.

The equipment proposed to be regulated by Proposed Rule (PR) 1153.1 are currently regulated under SCAQMD Rule 1147 – NOx Reductions from Miscellaneous Sources. Rule 1147 is based on two control measures from the SCAQMD 2007 AQMP: Control Measure MCS-01 – Facility Modernization and Control Measure CMB-01 – NOx Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces. Emission reductions from the equipment addressed by Rule 1147 and Control Measure CMB-01 of the 2007 AQMP were proposed to be regulated in earlier AQMPs (e.g., Control Measure 97CMB-092 from the 1997 AQMP). Because the 1997 8-hour ozone NAAQS (80 parts per billion (ppb)) has not yet been met for the region, NOx reductions are still necessary and required.

Ozone, a criteria pollutant that is formed when NOx and VOCs react in the atmosphere, has been shown to adversely affect human health. In 2012, the SCAQMD regularly monitored ozone concentrations at 31 locations in the Basin and the Salton Sea Air Basin (SSAB). Maximum ozone concentrations for all areas monitored were below the stage 1 episode level (0.20 parts per million (ppm)). Maximum ozone concentrations in the SSAB areas monitored by the SCAQMD were lower than in the Basin.

In 2012, the maximum ozone concentrations in the Basin continued to exceed federal standards by wide margins. Maximum one-hour ozone concentrations were 0.147 ppm recorded in East San Gabriel Valley 2 area and eight-hour average ozone concentrations were 0.106 ppm recorded in the Central San Bernardino Mountains area. The federal one-hour ozone standard was revoked and replaced by the eight-hour average ozone standard effective June 15, 2005. USEPA has revised the federal eight-hour ozone standard from 0.84 ppm to 0.075 ppm, effective May 27, 2008. The maximum eight-hour concentration was 141 percent of the new federal standard. The maximum one-hour concentration was 163 percent of the one-hour state ozone standard of

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

² Health and Safety Code, §40460 (a).

³ Health and Safety Code, §40440 (a).

0.09 ppm. The maximum eight-hour concentration was 151 percent of the eight-hour state ozone standard of 0.070 ppm.

The California Clean Air Act (CCAA) requires districts to achieve and maintain state standards by the earliest practicable date and for extreme non-attainment areas, to include all feasible measures pursuant to Health and Safety Code §§40913, 40914, and 40920.5. The term “feasible” is defined in Title 14 of the California Code of Regulations §15364 as a measure “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.”

AFFECTED FACILITIES

PR 1153.1 affects manufacturers of ovens, roasters and smokehouses (NAICS 333) and manufacturers of food and beverage products (NAICS 311 and 312) located throughout the SCAQMD jurisdiction (see Project Location). PR 1153.1 impacts over 200 ovens, roasters and smokehouses at approximately 100 facilities. The proposed rule will exempt approximately two thirds of the ovens from emission limit requirements (small and low use units). The owners and operators of these units are still subject to the combustion system maintenance and recordkeeping requirements that are carried over from Rule 1147. The maintenance requirements will help limit NO_x, CO, VOC and PM emissions from these units. An estimated 75 units would still be required to meet PR 1153.1 emission limits and demonstrate compliance through source testing. It is expected that most of the larger ovens will be able to comply with the proposed emission limits without changing burner systems.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Amending Rule 1153.1 is considered a “project” as defined by CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD is preparing a Draft Environmental Assessment (EA) to evaluate potential adverse impacts from the proposed project.

The SCAQMD, as lead agency for the proposed project, has prepared this initial study that includes an environmental checklist and project description. The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The initial study is also intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft EA. SCAQMD's review of the proposed project shows that PR 1153.1 may have a significant adverse effect on the environment. Because PR 1153.1 may have statewide, regional or areawide significance, a CEQA scoping meeting was held for the proposed project on April 2, 2014 pursuant to Public

Resources Code §21083.9 (a)(2), and another will be held during the comment period of the Notice of Preparation/Initial Study (NOP/IS). Written comments on the scope of the environmental analysis will be considered (if received by the SCAQMD during the 30-day public review period) when preparing the Draft EA. Responses to comments on the NOP/IS will be included in the Draft EA.

PROJECT LOCATION

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



Figure 1-1

Boundaries of the South Coast Air Quality Management District

PROJECT BACKGROUND

The equipment proposed to be regulated by PR 1153.1 is currently regulated under SCAQMD Rule 1147. Rule 1147 is based on two control measures from the SCAQMD 2007 AQMP: Control Measure MCS-01 – Facility Modernization and Control Measure CMB-01 – NOx

Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces. Emission reductions from the equipment addressed by Rule 1147 and Control Measure CMB-01 of the 2007 AQMP were proposed to be regulated in earlier AQMPs (e.g., Control Measure 97CMB-092 from the 1997 AQMP).

Control measure MCS-01 was a new control measure developed for the 2007 AQMP that proposes companies to upgrade their current technology to best available control technology (BACT) – the cleanest technology available. The facility modernization control measure proposes that equipment operators meet BACT emission limits at the end of the equipment's useful life. For equipment regulated by Rule 1147, modernization requires burner upgrades, replacement of burner systems or replacement of other combustion equipment when the equipment reaches 15 to 20 years of age.

Equipment that is regulated by Rule 1147 and PR 1153.1 must also meet the requirements of SCAQMD Regulation XIII – New Source Review (NSR) and SCAQMD Regulation IV – Prohibitions. Equipment subject to NSR must meet BACT requirements and offset emission increases. The SCAQMD's NSR program includes pre-construction permit review requirements for equipment and processes subject to permit requirements. Permit applications subject to NSR are required to utilize BACT for installation of new equipment, relocation of existing permitted equipment, or modification of existing permitted equipment when the equipment has a potential to emit more than one pound per day of NO_x. BACT is defined as the most stringent emission limitation or control technique that: has been achieved in practice, is contained in any state implementation plan (SIP) approved by U.S. EPA, or is any other emission limitation or control technique found by the Executive Officer to be technologically feasible and is cost-effective as compared to adopted rules or measured listed in the AQMP.

Regulation IV limits emissions of particulate matter, carbon monoxide and NO_x from combustion sources. However, NO_x emission limits required by BACT are significantly more stringent than the emission limits in Regulation IV. For example, Rule 474 – Fuel Burning equipment – Oxides of Nitrogen has emission limits that vary from 125 per million (ppm) to 400 parts ppm (referenced to 3% oxygen) depending upon the fuel and heat input rating of the equipment. NO_x emission limits under BACT for combustion equipment subject to Rule 1147 vary from 30 ppm to 60 ppm (referenced to 3% oxygen). Rule 407 in Regulation IV also has a CO limit of 2,000 ppm.

In May 2013 SCAQMD Rules 219 and 222 were amended to exempt specific small equipment from permit requirements including food ovens with low emissions of VOCs. These amendments moved some small ovens from the permit program into the Rule 222 registration program which exempts them from Rule 1147 and PR 1153.1.

Because of information provided by stakeholders at the time of adoption (amended September 9, 2011), Rule 1147 provides a later compliance date, until 2014, for food ovens. BACT for ovens and dryers has been 30 ppm NO_x since 1998 and the Rule 1147 NO_x limit is also 30 ppm, or 60 ppm if the process temperature is above 1,200 °F. However, stakeholders were concerned that achieving an emission concentration of 30 ppm was not achievable in older equipment using ribbon burners, a common burner used in commercial ovens.

Manufacturers and a research institute have been conducting research and tests to lower NOx emissions from these types of burners and were expected to achieve the Rule 1147 emission limits by 2014. Because these projects have not been completed and there are many older ovens heated with ribbon burners in the SCAQMD, staff proposed to move food ovens, roasters and smokehouses from Rule 1147 and place them in a new rule specific to these equipment. Staff is recommending a new rule (PR 1153.1) with slightly higher more achievable NOx emission limits and delay of the emission limit compliance dates for existing (in-use) permitted food ovens to comply with the lower limits. Staff is also recommending a carbon monoxide emission limit in PR 1153.1.

TECHNOLOGY OVERVIEW AND ASSESSMENT

PR 1153.1 regulates ovens, roasters, and smokehouses used to prepare food and beverages for human consumption. There are two main types of ovens – batch and conveyor ovens. Roasters and smokehouses are typically batch operations in which product is placed in the oven and removed when the process is complete. Conveyor ovens continuously take in food items, cook them and delivery the cooked product to an area where it can cool and then be packaged. Regardless of the type of food oven, they operate in three temperature ranges – less than 500 °F, 500 to 900 °F and greater than 900 °F.

Both batch and conveyor ovens may be manufactured with ribbon burners or one of two types of air heating burners. Air heating burners are used in convection ovens where the burner is not in close proximity to the product being cooked. One type of air heating burner is a line burner made up of one foot sections that can be put together in a variety of shapes, but in food ovens, they are typically aligned end to end. The other type of air heating burner has a cylindrical housing placed into the oven in which the burner flame is contained. Both of these types of burners may fire into a small space and air is moved through that space by blowers to be heated and moved on to the main chamber of the oven.

Many oven burners have historically been long sections of pipe with rows of holes down the length of the pipe. Gas and a small amount of air is introduced into the pipe and that mixture exits through the holes in the pipe where it is lit with a pilot flame. Most of the air for combustion is secondary air which is inside the oven and mixes with the gas as it exits the holes in the pipe.

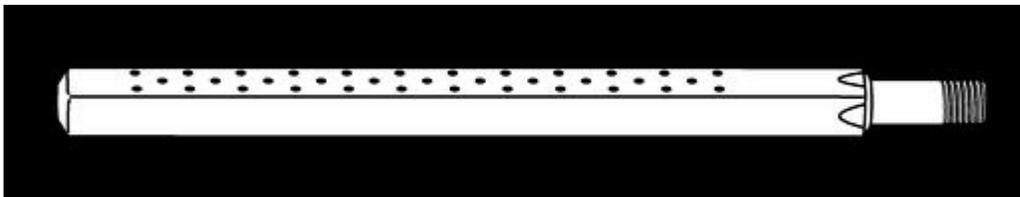


Figure 1-2 – Pipe Burner

Ribbon burners are similar to this older style of pipe burner but they have an insert along the length of the pipe that allows better control of the flame. They are also designed to provide premixing of air with fuel for more efficient and better control of combustion. The newest types of ribbon burners are made in a variety of ways, but they have more efficient mixing of air with the fuel inside the body of the burner and better control of the distribution of fuel gas in the

burner which result in lower NOx emissions. The lower emissions are also achieved because the flame that is produced has lower peak flame temperature which results in less NOx emissions. Some versions of newer ribbon burners also include water cooling which can also help lower emissions. Together with modern control systems, ribbon burners have lower emissions than traditional pipe and older ribbon burners.

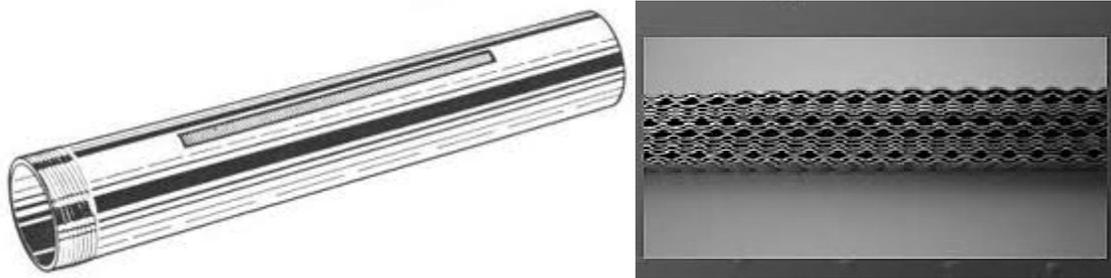


Figure 1-3 – Ribbon Burner Pipe and Flame Holding Surface

Food ovens can also use radiant systems to provide heat. One type of burner, made with ceramic or metal fiber flame holding surfaces, produces most of their heat as infrared radiation; they produce a red glow, and have very low NOx emissions. These are often called infrared burners and directly heat the product in the oven. Another type of unit has burners which heat the inside of tubes and the tubes then radiate heat to the process. This indirect heating system is called radiant tube heating.



Figure 1-4 – Infrared Burners

There are several options for reducing NOx emissions from combustion equipment subject to PR 1153.1. Some ovens may be able change their process so heat is generated by electricity. Many ovens currently use heat generated by electricity, so the process is not new. Other ovens may be able to use heat generated by a boiler or thermal fluid heater. Heat transfer from steam or thermal fluids can be an efficient and cost effective way to heat a process. However, heat transfer from a boiler or thermal fluid heater requires the use of a heat exchange system to warm air and the process chamber that heats the product. This option is time-consuming and costly. For the majority of processes however, the preferred option to reduce NOx emissions will be tuning or replacing the burner system.

In general, low NOx burners can achieve less than 10 ppm NOx. There are many types of burners with emission in the range of 20 to 60 ppm NOx. The manufacturers of these burners use a variety of techniques to achieve lower emissions. The principal technique is better premixing of fuel and air before combustion takes place. This results in more efficient

combustion of fuel and a more uniform flame temperature. A more uniform flame temperature results in fewer hot spots and reduced formation of NO_x.

Many premix burners require the aid of a blower to mix the fuel with air before combustion takes place (primary air). However, residential tank type water heaters, some small boilers and other equipment are now made with atmospheric premix burners that achieve NO_x emissions in the range of 15 to 60 ppm. Atmospheric burners do not use a blower to mix fuel and air. The burners in these units combine premixing with specially designed burner heads that reduce flame temperature and NO_x emissions by spreading the flame over a larger area. Premixing of fuel and air is accomplished using a jet of fuel gas exiting a specially designed nozzle. The velocity of the fuel leaving the nozzle draws air into a mixing zone and mixing is completed before the fuel and air mixture leaves the burner.

A variety of burners are designed to spread flames over a larger area to reduce hot spots and lower NO_x emissions. One type, radiant premix burners, has been available for several decades. Radiant premix burners are made with ceramic, sintered metal, metal screen or metal fiber heads that spread the flame over a larger surface. These burners can be run in either radiant or blue flame modes. When a burner runs in radiant mode, the flame surface is red instead of blue and it produces more radiant heat. These burners come in a variety of shapes including flat and cylindrical.

To further reduce NO_x emissions, some premix burners also use staged combustion. This technique produces two combustion zones with differing air-fuel mixtures. The burner produces a fuel rich zone to start combustion and stabilize the flame and a fuel lean zone to complete combustion and reduce the peak flame temperature. In combination, these two zones reduce the formation of NO_x. This technique incorporates premixing and can be used in combination with other techniques.

Current Technology

As previously mentioned, food ovens are currently regulated under Rule 1147. Rule 1147 NO_x emission limits are based on BACT. BACT determinations by the SCAQMD and other air districts since 1998 have resulted in emission limits of 30 to 60 ppm for equipment ranging from low temperature ovens to very high temperature metal melting and heat treating furnaces. The BACT NO_x limit since 1998 for most ovens and dryers, including food ovens, has been 30 ppm.

Rule 1147 requires equipment to meet NO_x emission limits in the range of 30 ppm to 60 ppm (referenced to 3% oxygen) depending upon the process and process temperature. The emission limits are based on SCAQMD and other air district's determinations for BACT, availability of burners that can achieve these emission levels and recent emission limits decisions for SCAQMD permits. Currently, the typical emission for low NO_x burners applicable to equipment subject to Rule 1147 varies from less than 20 ppm to 60 ppm depending upon the burner, process temperature and nature of the process.

PR 1153.1 has NO_x emission limits of 40 to 60 ppm based on process temperature. These proposed NO_x emission limits are based on comments from affected industry, equipment and burner manufacturers and local businesses. For existing technology, local businesses and a major customer of the burner manufacturers proposed NO_x emission limits in the range of 35 to

60 ppm depending upon process temperature. Burner manufacturers have recommended achievable NOx emission limits as low as 30 ppm for lower process temperatures below about 500 °F and 60 ppm for higher process temperatures above 900 °F. For process temperatures between about 500 and 900 °F an emission limit of 45 ppm was suggested, but was rejected. Based on these comments, PR 1153.1 is proposing NOx emission limits for existing in-use equipment at 40 ppm for processes below 500 °F and 60 ppm for processes above 500 °F, except only radiant tube heating which is 60 ppm for processes below 500 °F.

The Gas Company and the Gas Technology Institute are conducting a project to reduce emissions from ribbon burners. The design goal is to achieve NOx emissions of 30 ppm across a wide range of temperatures. The project is currently moving from the testing stage of burners to the installation of the modified burners into test ovens. The project is expected to be completed in 2016. Individual burner manufacturers also have developed new burners to achieve NOx emissions of 30 ppm across a wide range of process temperatures.

To meet PR 1153.1 emission limits, some ovens with ribbon burners will only need tuning and regular maintenance to comply. In other cases, compliance with the emission limits will require replacement with newer design lower emitting burners and/or upgrades to burner control systems.

Air heating and infrared burners used in food ovens can easily achieve the emission limits of PR 1153.1 and are the basis for the BACT NOx limit of 30 ppm for most ovens and dryers. These burners are readily available. These burners and some older design air heating burners will achieve the emission limits specified in PR 1153.1.

Radiant tube heating systems can also achieve the emission limits of PR 1153.1 but will require replacement with larger diameter tubes in order to use burners that will meet the proposed NOx limits. However, PR 1153.1 provides up to 20 years of use before an oven has to meet the emission limit. Because firing tubes eventually need to be replaced (boiler fire tubes are typically replaced every 8 to 12 years), the proposed rule provides sufficient time for the original heating system to be upgraded.

There are many suppliers of ribbon burners for food ovens and many manufactures of air heating and radiant burners used in food ovens and roasters. Currently suppliers of ribbon burners for food ovens have products that will achieve the proposed NOx limits for the equipment regulated by PR 1153.1. The suppliers of other types of burners which are typically found in food ovens also produce burners that meet the NOx limits in Rule 1147 and PR 1153.1.

PROJECT DESCRIPTION

The purpose of the proposed project is to limit NOx emissions from gaseous and liquid fuel fired combustion equipment as defined in PR 1153.1. PR 1153.1 applies to in-use ovens, dryers, smokers and roasters with NOx emissions from fuel combustion that require a District permit and are used to prepare food or beverages for human consumption. The proposed rule does not apply to solid fuel-fired combustion equipment, fryers, char broilers, or boilers, water heaters, thermal fluid heaters and process heaters subject to District Rules 1146, 1146.1, or 1146.2.

The following is a summary of the key components of PR 1153.1. A copy of PR 1153.1 can be found in Appendix A.

- PR 1153.1 includes NOx emission limits of 40 to 60 ppm and a CO limit of 800 ppm (please see Table 1-1 for a specific breakdown of equipment categories);
- PR 1153.1 includes an emission testing requirement but delays compliance dates for at least 2 additional years beyond the dates currently set in Rule 1147;
- PR 1153.1 phases in compliance based on a longer 20 year equipment life instead of the 15 years used in Rule 1147. Figure 1-5 compares the compliance schedules of Rule 1147 and PR 1153.1;

Category	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18	Jul-19	Jul-20	Beyond
Rule 1147								
> 1 lb/day & Mft < 1998								
> 1 lb/day & Unit 15 yrs old								
≤ 1 lb/day & Mft < 1998								
≤ 1 lb/day & Unit 20 yrs old								
Propose Rule 1153.1								
In Use & Mft < 1992 (25 yrs old)*								
In Use Pita and griddle & Mft < 1994								
In Use & Mft < 2000 (20 years old)								
In Use & 20 years old								

Figure 1-5 – Proposed Rule 1153.1 Compliance Schedule

- PR 1153.1 also includes options for alternate compliance plans, equipment certification and a mitigation fee option to delay compliance;
- The following two tables indicate the NOx emission limits and compliance dates for PR 1153.1;

Table 1-1 – NO_x Emission Limit

Equipment Category(ies)	NO _x Emission Limit		
	PPM @ 3% O ₂ , dry or Pound/mmBTU heat input		
	Process Temperature		
	≤ 500° F	> 500° F and < 900° F	≥ 900° F
In-use units with only radiant tube heating	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU
Other in-use units	40 ppm or 0.042 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU

Table 1-2 – Compliance Schedule for In-Use Units

Equipment Category(ies)	Submit Permit Application	Unit Shall Be in Compliance
Griddle ovens and ovens used solely for making pita bread and manufactured prior to 1994	October 1, 2017	July 1, 2018
Other UNIT manufactured prior to 1992	October 1, 2015	July 1, 2016
Other UNIT manufactured prior to 2000	October 1, 2018	July 1, 2019
Any UNIT manufactured after 2000	October 1 of the year prior to the compliance date	July 1 of the year the unit is 20 years old

- PR 1153.1 includes an exemption from the emission limit and testing for small and low-use units with NO_x emissions of one pound per day or less;
- In addition, the proposed rule includes a testing exemption for infrared burners that have significantly lower NO_x emission than the limits in PR 1153.1.

ALTERNATIVES

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

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

SCAQMD's policy document Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, Enhancement II-1 recommends that all SCAQMD CEQA assessments include a feasible project alternative with the lowest air toxics emissions. In other words, for any major equipment or process type under the scope of the proposed project that creates a significant environmental impact, at least one alternative, where feasible, shall be considered from a "least harmful" perspective with regard to hazardous air emissions.

The SCAQMD may choose to adopt any portion or the entirety of any alternative presented in the EA because the impacts of each alternative will be fully disclosed to the public and the public will have the opportunity to comment on the alternatives and impacts generated by each alternative. Written suggestions on potential project alternatives received during the comment period for the Initial Study will be considered when preparing the Draft EA.

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:	Initial Study (IS) for Proposed Rule (PR) 1153.1 – Emissions of Oxides of Nitrogen from Food Ovens
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Mr. Jeff Inabinet (909) 396-2453
PR 1153.1 Contact Person	Mr. Wayne Barcikowski (909) 396-3077
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:	PR 1153.1 would limit emissions of nitrogen oxides (NO _x) and carbon monoxide (CO) from the combustion of gaseous and liquid fuels in food ovens, roasters and smokehouses. This equipment is currently regulated by SCAQMD Rule 1147 – NO _x Reductions from Miscellaneous Sources and Regulation XIII – New Source Review (NSR). Rule 1147 limits emissions of NO _x from gaseous and liquid fuel fired combustion equipment that are not specifically addressed in other SCAQMD Regulation XI – Source Specific Standards. However, because control technologies have not matured in a timely manner for commercial food ovens, SCAQMD staff proposed to regulate these sources separately from the other Rule 1147 sources. Under a separate regulation, the commercial food ovens would be placed on a more suitable compliance schedule with achievable emission limitations.
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project.

An explanation relative to the determination of impacts can be found following the checklist for each area.

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

DETERMINATION

On the basis of this initial evaluation:

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

Date: April 24, 2014

Signature: 
Michael Krause
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As discussed in Chapter 1, the main focus of PR 1153.1 is to limit NOx and CO emissions from gaseous and liquid fuel fired combustion equipment as defined in PR 1153.1 (food ovens, roasters and smokehouses).

PR 1153.1 impacts over 200 ovens, roasters and smokehouses at approximately 100 facilities. The proposed project will exempt approximately two thirds of the ovens from the emission limit requirements (small and low use units). An estimated 75 units would still be required to meet PR 1153.1 emission limits and demonstrate compliance through source testing. It is expected that most of the larger ovens will be able to comply with the proposed emission limits without changing burner systems. Further, no add-on control equipment is expected to be used to comply with the new emission limits. See Chapter 1 for a more detailed description of the operation of burner equipment and the lowering of NOx emissions.

Emissions of VOCs and PM are not expected to change compared with Rule 1147. However, NOx emission reductions for PR 1153.1 are delayed compared with Rule 1147 and will result in approximately 120 pounds per day of NOx emissions foregone by 2023 as a result of an increase in the allowable NOx ppm limit. This is considered a significant air quality impact and will be further evaluated in an environmental assessment.

PR 1153.1 is not anticipated to have the potential to create any other potential significant adverse environmental impacts.

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

Significance Criteria

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

- The project will block views from a scenic highway or corridor.

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

Discussion

I. a), b), c) & d) Adoption of PR 1153.1 would implement higher NO_x emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. The proposed project is expected to affect facilities at existing locations. The proposed project does not require construction of new buildings or new add-on controls. Therefore, adoption of PR 1153.1 would not require the construction of new 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, PR 1153.1 would not involve the demolition of any existing buildings or facilities, require any subsurface activities, require the acquisition of any new land or the surrendering of existing land, or the modification of any existing land use designations or zoning ordinances. Thus, the proposed project is not expected to degrade the visual character of any site where a facility is located or its surroundings, affect any scenic vista or damage scenic resources. Since the proposed project does not require existing facilities to operate at night, it is not expected to create any new source of substantial light or glare.

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

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on agriculture and forestry 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 conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- 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 use or conversion of forest land to non-forest use.

Discussion

II. a), b), c) & d) The existing industrial or commercial businesses that may be affected by the adoption of PR 1153.1 are primarily located within urbanized areas that are typically designated as industrial or commercial. The proposed project would not result in any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. The proposed project would not require converting farmland to non-agricultural uses because the affected food oven, roaster and smokehouse operations are expected to occur completely within the confines of existing affected commercial and industrial facilities. For the same reasons, PR 1153.1 would not result in the loss of forest land or conversion of forest land to non-forest use.

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

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

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Air Quality Significance Criteria

To determine whether or not air quality impacts from adopting and implementing PR 1153.1 are significant, impacts will be evaluated and compared to the criteria in Table 2-1. The project will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

To determine whether or not greenhouse gas emissions from the proposed project may be significant, impacts will be evaluated and compared to the 10,000 MT CO₂/year threshold for industrial sources.

**TABLE 2-1
SCAQMD Air Quality Significance Thresholds**

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO ₂ eq for industrial facilities	

TABLE 2-1
SCAQMD Air Quality Significance Thresholds (concluded)

Ambient Air Quality Standards for Criteria Pollutants^d	
NO₂ 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)
PM₁₀ 24-hour average annual average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³
PM_{2.5} 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)
SO₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)
Sulfate 24-hour average	25 µg/m ³ (state)
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) and 35 ppm (federal) 9.0 ppm (state/federal)
Lead 30-day Average Rolling 3-month average Quarterly average	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal) 1.5 µg/m ³ (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 µg/m³ = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO₂eq = metric tons per year of CO₂ equivalents > = greater than

III. a) The equipment proposed to be regulated by PR 1153.1 are currently regulated under SCAQMD Rule 1147. Rule 1147 was based on two control measures from the SCAQMD 2007 AQMP: Control Measure MCS-01 – Facility Modernization and Control Measure CMB-01 – NOx Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces.

Control measure MCS-01 was a new control measure developed for the 2007 AQMP that proposed companies upgrade their current technology to best available control technology (BACT) – the cleanest technology available. The facility modernization control measure proposed that equipment operators meet BACT emission limits at the end of the equipment's useful life. For equipment regulated by Rule 1147, modernization requires burner upgrades, replacement of burner systems or replacement of equipment when the equipment reaches 15 to 20 years of age. PR 1153.1 would affect food oven, roaster and smokehouse operations. Since affected facilities/operations are anticipated to already comply with the proposed requirements, the proposed rule is not expected to achieve additional NOx reductions to be credited toward CMB-01 or MCS-01.

Implementing PR 1153.1 is not expected to significantly conflict with or obstruct implementation of the applicable air quality control plan because the 2012 AQMP demonstrates that the effects of all existing rules, in combination with implementing all AQMP control measures (including “black box” measures not specifically described in the 2012 AQMP) would bring the District into attainment with all applicable national and state ambient air quality standards. PR 1153.1 will allow a higher NO_x limit than under Rule 1147 but the foregone emissions are expected to be achieved through other control measures addressed in the AQMP. Therefore, PR 1153.1 is not expected to significantly conflict or obstruct implementation of the applicable air quality plan, but instead, when lower NO_x limits are met, would contribute to attaining and maintaining the ozone and PM standards.

So, while PR 1153.1 will have a potential to obstruct the AQMP by not achieving all reductions committed in 2007, implementation of all other SCAQMD NO_x rules along with AQMP control measures, when considered together, is expected to reduce NO_x emissions throughout the region overall by 2023. Therefore, implementing the proposed project will not conflict or obstruct the overall implementation of the 2012 AQMP.

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

Facility Applicability

The main objective of PR 1153.1 is to limit NO_x and CO emissions from gaseous and liquid fuel fired combustion equipment as defined in PR 1153.1 (food ovens, roasters and smokehouses).

PR 1153.1 affects manufacturers of ovens, roasters and smokehouses (NAICS 333) and manufacturers of food and beverage products (NAICS 311 and 312) located throughout the SCAQMD jurisdiction (see Project Location in Chapter 1). PR 1153.1 impacts over 200 ovens, roasters and smokehouses at approximately 100 facilities. The proposed rule will exempt approximately two thirds of the ovens from emission limit requirements (small and low use units). The owners and operators of these units are still subject to the combustion system maintenance and recordkeeping requirements that are carried over from Rule 1147. The maintenance requirements will help limit NO_x, CO, VOC and PM emissions from these units. An estimated 75 units would still be required to meet PR 1153.1 emission limits and demonstrate compliance through source testing. It is expected that most of the larger ovens will be able to comply with the proposed emission limits without changing burner systems.

Construction Impacts

Adoption of PR 1153.1 would implement higher NO_x emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. The proposed project is expected to affect facilities at existing locations. The proposed project does not require construction of new buildings and any potential equipment replacement would require minimum construction, as burners are pre-manufactured items that typically drop into place. Therefore, adoption of PR 1153.1 would not require the construction of new buildings or other structures that would generate construction emissions. Although there could be a delivery truck if a facility chooses to install a new burner, the adverse impact is not anticipated to be significant. Therefore, no additional vehicle trips would be generated by PR 1153.1 since equipment replacement is already expected to comply with Rule 1147. Thus, there would be no increase of emissions.

As a result, according to the above analysis of potential construction impacts, there would be no significant adverse construction air quality impacts resulting from the proposed project for criteria pollutants.

Operational Impacts- Criteria Pollutants

As mentioned above, PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. Based on SCAQMD staff research, the affected facilities are already compliant with the proposed project. Therefore, there would be no change in operational emissions from the existing affected facilities. However, NOx emission reductions for PR 1153.1 are delayed compared with Rule 1147 and will result in approximately 120 pounds per day of NOx emissions forgone by 2023. Detailed analysis of the NOx emissions foregone as a result of the proposed project will be included in the Draft EA.

Emissions of CO, VOC and PM are not expected to change as a result of the proposed project compared with the requirements for affected sources under Rule 1147.

Operational Impacts- Toxic Air Contaminants

In assessing potential impacts from the adoption of proposed rules, SCAQMD staff not only evaluates the potential air quality benefits, but also determines potential health risks associated with implementation of the proposed rule.

As stated previously, PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses.

Based on SCAQMD staff research, the affected facilities are already compliant with the proposed project. Therefore, there would be no change in toxic operational emissions from the existing affected facilities. Therefore, no changes in toxicity are expected in comparison with Rule 1147. As a result, there will be no increase in toxic air contaminant emissions from the affected facilities due to the proposed rule.

III. c) PR 1153.1 will be evaluated for any potential cumulatively considerable air quality impacts in the Draft EA.

III. d) Affected facilities are also not expected to increase exposure by sensitive receptors to substantial pollutant concentrations from the implementation of PR 1153.1 for the following reasons: 1) the affected facilities are existing facilities located primarily in commercial/industrial areas; 2) no construction and operational emission increases are associated with the proposed project from the existing setting. Therefore, no significant adverse air quality impacts to sensitive receptors are expected from implementing PR 1153.1.

III. e) Odor problems depend on individual circumstances, materials involved, and individual odor sensitivities. For example, individuals can differ quite markedly from the population average in their sensitivity to odor due to any variety of innate, chronic or acute physiological

conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the smell sensation).

As already noted, the proposed project does not result in the use of construction equipment. As a result, no odor impacts associated with diesel exhaust from either on-road or off-road mobile sources are expected to occur. Additionally, no change in operation at the affected facilities is expected to occur as a result of the adoption of PR 1153.1. Therefore, the proposed project is not expected to create new significant adverse objectionable odors.

III. f) The affected facilities would continue to be required to comply with all applicable SCAQMD, CARB, and USEPA rules and regulations. Based on SCAQMD staff research, the affected facilities are already compliant with the proposed project. Therefore, there would be no change in operational emissions from the existing affected facilities. However, NO_x emission reductions for PR 1153.1 are delayed compared with Rule 1147 and will result in approximately 120 pounds per day of NO_x emissions forgone by 2023. Detailed analysis of the NO_x emissions forgone as a result of the proposed project will be included in the Draft EA.

III. g) & h) Changes in global climate patterns have been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, recently attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming.¹ State law defines GHG to include the following: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) (HSC §38505(g)). The most common GHG that results from human activity is CO₂, followed by CH₄ and N₂O.

GHGs and other global warming pollutants are often perceived as solely global in their impacts and that increasing emissions anywhere in the world contributes to climate change anywhere in the world. However, a study conducted on the health impacts of CO₂ "domes" that form over urban areas cause increases in local temperatures and local criteria pollutants, which have adverse health effects.²

The analysis of GHGs is a much different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, the significance thresholds are based on daily emissions because attainment or non-attainment is primarily based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., one-hour and eight-hour standards). Since the half-life of CO₂ is approximately 100 years, for example, the effects of

¹ Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). 2007. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007. Cambridge University Press.
http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html

² Jacobsen, Mark Z. "Enhancement of Local Air Pollution by Urban CO₂ Domes," Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at:
<http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html>.

GHGs occur over a longer term which means they affect the global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate the effects of GHGs over a longer timeframe than a single day (e.g., annual emissions). GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects.

On December 5, 2008, the SCAQMD adopted an interim CEQA GHG Significance Threshold for projects where SCAQMD is the lead agency (SCAQMD, 2008). This interim threshold is set at 10,000 metric tons of CO₂ equivalent emissions (MTCO₂eq) per year. Projects with incremental increases below this threshold will not be cumulatively considerable.

The proposed project does not introduce the need to directly emit GHG emissions beyond Rule 1147. PR 1153.1 is not expected to create significant cumulative adverse GHG emission impacts or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Conclusion

Potentially significant adverse air quality impacts from the adoption and implementation of PR 1153.1 will be further evaluated in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

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

Discussion

IV. a), b), c), & d) PR 1153.1 would not require any new development or require major modifications to buildings or other structures to comply with the new requirements for food ovens, roasters and smokehouses beyond what is currently required in Rule 1147. The equipment affected is expected to be located at existing facilities that are already paved. As a result, PR 1153.1 would not directly or indirectly affect any species identified as a candidate, sensitive or special status species, riparian habitat, federally protected wetlands, or migratory

corridors. For this same reason, PR 1153.1 is not expected to adversely affect special status plants, animals, or natural communities.

IV. e) & f) PR 1153.1 would not conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because it would not cause new development. Additionally, PR 1153.1 would not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan for the same reason identified in Item IV. a), b), c), and d) above. Likewise, the proposed project would not in any way impact wildlife or wildlife habitat.

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

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

Significance Criteria

Impacts to cultural resources will be considered significant if:

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

Discussion

V. a), b), c), & d) PR 1153.1 does not require construction of new facilities, increasing the floor space of existing facilities, or any other construction activities that would require disturbing

soil that may contain cultural resources beyond what is currently required in Rule 1147. The equipment affected is expected to be located at existing facilities that are already paved. Since no construction-related activities requiring soil disturbance would be associated with the implementation of PR 1153.1, no adverse impacts to historical or cultural resources are anticipated to occur. Further, PAR 1153.1 is not expected to require any physical changes to the environment, which may disturb paleontological or archaeological resources or disturb human remains interred outside of formal cemeteries.

Based upon these considerations, significant adverse cultural resources impacts are not expected from implementing PAR 1153.1 and will not be further assessed in the Draft EA. Since no significant cultural resources impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

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

Discussion

VI. a) & e) Adoption of PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate

compliance plans and mitigation fee options for food ovens, roasters and smokehouses. The proposed rule amendments are not expected to create any additional demand for energy at any of the affected facilities beyond what is currently required in Rule 1147. Since it is unlikely that the affected facilities would require new equipment or modifications, it is unlikely that energy demand requirements would change. As a result, PR 1153.1 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 PR 1153.1 would affect primarily existing facilities, it will not conflict with adopted energy conservation plans because existing facilities would be expected to continue implementing any existing energy conservation plans. Additionally, operators of affected facilities are expected to implement existing energy conservation plans or comply with energy standards to minimize operating costs. Accordingly these impact issues will not be further analyzed in the draft EA.

VI. b), c) & d) The proposed amendments are not expected to increase any electricity or natural gas demand in any way and would not create any significant effects on peak and base period demands for electricity and other forms of energy.

PR 1153.1 is not expected to generate significant adverse energy resources impacts and will not be discussed 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 With Mitigation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

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

Discussion

VII. a) Southern California is an area of known seismic activity. Structures must be designed to comply with the Uniform Building Code Zone 4 requirements if they are located in a seismically active area. The local city or county is responsible for assuring that a proposed project complies with the Uniform Building Code as part of the issuance of the building permits and can conduct

inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some non-structural damage; and 3) resist major earthquakes without collapse but with some structural and non-structural damage.

The Uniform Building Code bases seismic design on minimum lateral seismic forces (“ground shaking”). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Accordingly, buildings and equipment at existing affected facilities are likely to conform with the Uniform Building Code and all other applicable state codes in effect at the time they were constructed.

No new buildings or structures are expected to be constructed in response to the proposed project, so no change in geological existing setting is expected. Any equipment modification would not affect geology beyond what is currently required by Rule 1147. Therefore, PR 1153.1 is not expected to affect a facility’s ability to continue to comply with any applicable Uniform Building Code requirements. Consequently, PR 1153.1 is not expected to expose persons or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structure to the risk of loss, injury, or death involving seismic-related activities is not anticipated and will not be further analyzed in this draft EA.

VII. b), c), d) & e) Since PR 1153.1 would affect primarily existing facilities, it is expected that the soil types present at the affected facilities that are susceptible to expansion or liquefaction would be considered part of the existing setting. New subsidence impacts are not anticipated since no excavation, grading, or fill activities will occur at affected facilities. Further, the proposed project does not involve drilling or removal of underground products (e.g., water, crude oil, et cetera) that could produce new, or make worse existing subsidence effects. Additionally, the affected areas are not envisioned to be prone to new risks from landslides or have unique geologic features, since the affected facilities are located in industrial or commercial areas where such features have already been altered or removed. Finally, since adoption of PR 1153.1 would be expected to affect operations at primarily existing facilities, the proposed project is not expected to alter or make worse any existing potential for subsidence, liquefaction, etc.

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

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

Significance Criteria

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

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

Discussion

VIII. a, b) & c) The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials, due to the fact that the proposed amendments do not require the transport, use, and disposal of hazardous materials. Based on the fact that the proposed rules do not require the transport, use and disposal of hazardous materials, PR 1153.1 will not create a significant hazard to the public or environment through a reasonably foreseeable release of these materials into the environment.

Based on the facts, there is no additional formulation required, thus little likelihood that affected facilities will emit new hazardous emissions or handle hazardous materials, substances or waste within one-quarter mile of an existing or proposed school as a result of implementing the proposed project. The affected facilities are typically located in light industrial or commercial areas, but the proposed project does not introduce any hazardous materials, so the existing setting does not change. Further, the equipment affected by PR 1153.1 (food ovens, roasters and smokehouses) is not expected to use hazardous materials in normal operations. Therefore no hazardous wastes or emissions are expected to be generated that would affect any existing or proposed schools within one-quarter mile of affected facilities.

VIII. d) Government Code §65962.5 typically refers to a list of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits. For any facilities affected by the proposed project that are on the Government Code §65962.5 list, it is anticipated that they would continue to manage any and all hazardous materials and hazardous waste, in accordance with federal, state and local regulations.

VIII. e) Since PR 1153.1 affects food ovens, roasters and smokehouses, implementation of PR 1153.1 is not expected to increase or create any new hazardous emissions in general, which could adversely affect public/private airports located in close proximity to the affected sites. Implementation of PR 1153.1 is not expected to create any additional safety hazards for people residing or working in the project area.

VIII. f) The proposed project will not impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. Any existing commercial or light industrial facilities affected by the proposed project will typically have their own emergency response plans. Any new facilities will be required to prepare emergency response and evacuation plans as part of the land use permit review and approval process conducted by local jurisdictions for new development. Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public (surrounding local communities), but the facility employees as well. Since the proposed

project does not involve the change in current uses of any hazardous materials, or generate any new hazardous waste, no changes to emergency response plans are anticipated.

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

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

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. Adopting PR 1153.1 is not expected to hinder in any way with the above business emergency response plan requirements.

VIII. g) Since the affected facilities are primarily located in industrial or commercial areas where wildlands are typically not prevalent, risk of loss or injury associated with wildland fires is not expected as a result of implementing PR 1153.1.

VIII. h) Affected food oven, roaster and smokehouse facilities must comply with all local and county requirements for fire prevention and safety. The proposed project does not require any activities which would be in conflict with fire prevention and safety requirements, and thus would not create or increase fire hazards at these existing facilities. Pursuant to local and county

fire prevention and safety requirements, facilities are required to maintain appropriate site management practices to prevent fire hazards. PR 1153.1 will not interfere with fire prevention practices.

In conclusion, potentially significant adverse hazard or hazardous material impacts resulting from adopting and implementing PR 1153.1 are not expected and will not be considered further. No mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Place housing or other structures 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, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) 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, or inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

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.

Discussion

IX. a), b), c), d) & g) Adoption of PR 1153.1 would implement higher NO_x emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. Additional water usage will not result from operating the affected sources at higher NO_x emission levels, compared to existing Rule 1147.

No additional wastewater generation is expected to result from the proposed project. Further, PR 1153.1 has no provision that would require the construction of additional water resource facilities, increase the need for new or expanded water entitlements, or alter existing drainage patterns. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. PR 1153.1 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Further, the adoption of PR 1153.1 would not create a change in the current volume of existing wastewater streams from the affected facilities. In addition, the proposed amended rule is not expected to require additional wastewater disposal capacity, violate any water quality standard or wastewater discharge requirements, or otherwise substantially degrade water quality.

Adoption of PR 1153.1 could affect future operations at existing facilities that are typically located in industrial or commercial areas that are already paved and have drainage infrastructures in place. No new major construction is anticipated. Based on the current food oven, roaster and smokehouse facility inventory in the District, implementation of PR 1153.1 is not expected to involve major construction activities including site preparation, grading, etc., so no changes to storm water runoff, drainage patterns, groundwater characteristics, or flow are expected. Therefore, these impact areas are not expected to be affected by PR 1153.1.

PR 1153.1 is not expected to have significant adverse water demand or water quality impacts for the following reasons:

- The proposed project does not increase demand for water by more than 5,000,000 gallons per day.
- The proposed project does not require construction of new water conveyance infrastructure.
- The proposed project does not create a substantial increase in mass inflow of effluents to public wastewater treatment facilities.
- The proposed project does not result in a substantial degradation of surface water or groundwater quality.
- The proposed project does not result in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The proposed project does not result in alterations to the course or flow of floodwaters.

IX. i) The proposed project is not expected to change existing operations at affected facilities, nor would it result in the generation of increased volumes of wastewater, because no increased water usage is expected due to the proposed project. As a result, there are no potential changes in wastewater volume expected from facilities as a result of the adoption of PR 1153.1. It is expected that facilities and operations will continue to handle wastewater generated in a similar manner and with the same equipment as the wastewater that is currently generated. Further, PR 1153.1 is not expected to cause affected facilities to violate any water quality standard or wastewater discharge requirements since there would be no additional wastewater volumes generated as a result of adopting PR 1153.1.

IX. e), f) & h) The proposed project would increase NO_x limits for food oven, roaster and smokehouse facilities, compared to existing Rule 1147. As a result, PR 1153.1 would not require construction of new housing, contribute to the construction of new building structures, or require major modifications or changes to existing structures. Further, PR 1153.1 is not expected to require additional workers at affected facilities because the proposed project does not affect how equipment is operated. Therefore, PR 1153.1 is not expected to generate construction of any new structures in 100-year flood areas as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map. As a result, PR 1153.1 is not expected to expose people or structures to significant new flooding risks, or make worse any existing flooding risks. Because PR 1153.1 would not require construction of new structures or the addition of new employees, the proposed project will not affect in any way any potential flood hazards inundation by seiche, tsunami, or mud flow that may already exist relative to existing facilities or create new hazards at existing facilities. Additionally, since PR 1153.1 does not require additional water usage or demand, sufficient water supplies are expected to be available to serve the project from existing entitlements and resources, and no new or expanded entitlements would be needed.

Based upon these considerations, significant hydrology and water quality impacts are not expected from the adoption of PR 1153.1 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 With Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING.				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

Discussion

X. a) PR 1153.1 would not require any new development or require major modifications to buildings or other structures to comply with the new requirements for food ovens, roasters and smokehouses at any of the currently existing facilities beyond what is currently required by Rule 1147. Therefore, PR 1153.1 does not include any components that would require physically dividing an established community.

X. b) There are no provisions in PR 1153.1 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 would be altered by the new requirements for food oven, roaster or smokehouse operations beyond what is currently required by Rule 1147. Therefore, as already noted in the discussion under “Biological Resources,” PR 1153.1 would not affect in any habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. Present or planned land uses in the region would not be significantly adversely affected as a result of implementing the proposed rule.

Based upon these considerations, significant adverse land use and planning impacts are not expected from the implementation of PR 1153.1 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 With Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

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

Discussion

XI. a) & b) There are no provisions in PR 1153.1 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. Since the proposed project is likely only to affect currently existing food oven, roaster and smokehouse operations that do not use or duplicate mineral resources, PR 1153.1 does not require and would not have any effects on the use of important minerals, such as those described above. Therefore, no new demand for mineral resources is expected to occur and significant adverse mineral resources impacts from implementing PR 1153.1 are not anticipated.

Based upon these aforementioned considerations, significant mineral resources impacts are not expected from the implementation of PR 1153.1. Since no significant mineral resources impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

Noise impact 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) Adoption of PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. PR 1153.1 would not require any new development or require major modifications to buildings or other structures to comply with the proposed rule at any of the currently existing facilities beyond what is currently required by Rule 1147. All of the affected activities occur within existing facilities. Compliance with the

new requirements for food oven, roaster and smokehouse operations are not expected to adversely affect operations at affected facilities because the existing facilities meet the currently proposed requirements. Thus, the proposed project is not expected to expose persons to the generation of excessive noise levels above current facility levels because no change in current operations is expected to occur as a result of the proposed project. It is expected that any facility affected by PR 1153.1 would continue complying with all existing local noise control laws or ordinances.

In commercial environments, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health. It is expected that operators at affected facilities will continue complying with applicable OSHA or Cal/OSHA noise standards, which would limit noise impacts to workers, patrons and neighbors.

XII. b) PR 1153.1 is not anticipated to expose people to, or generate excessive groundborne vibration or groundborne noise levels since complying with PR 1153.1 is not expected to alter operations at affected facilities. Therefore, any existing noise or vibration levels at affected facilities are not expected to change as a result of implementing PR 1153.1. Since existing operations are not expected to generate excessive groundborne vibration or noise levels, and PR 1153.1 is not expected to alter physical operations, no groundborne vibrations or noise levels are expected from the proposed rule.

XII. c) No increase in periodic or temporary ambient noise levels in the vicinity of affected facilities above levels existing prior to implementing PR 1153.1 is anticipated because the proposed project would not require heavy-duty diesel-fueled construction-related activities nor would it change the existing activities currently performed by food oven, roaster or smokehouse operations. See also the response to items XII.a) and XII.b).

XII. d) Even if an affected facility is located near a public/private airport, there are no new noise impacts expected from any of the existing facilities as a result of complying with the proposed project. Similarly, any existing noise levels at affected facilities are not expected to increase appreciably. Thus, PR 1153.1 is not expected to expose people residing or working in the vicinities of public airports to excessive noise levels.

Based upon these considerations, significant adverse noise impacts are not expected from the implementation of PR 1153.1 and will not be further evaluated in the Draft EA. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

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

Discussion

XIII. a) The proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on the district's population or population distribution as no additional workers are anticipated to be required for affected facilities to comply with the proposed rule. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PR 1153.1. As such, PR 1153.1 would not result in changes in population densities or induce significant growth in population.

XIII. b) Because the proposed project affects food oven, roaster and smokehouse facilities but does not require additional employees, PR 1153.1 is not expected to result in the creation of any new industry that would affect population growth, directly or indirectly, induce the construction of single- or multiple-family units, or require the displacement of people elsewhere. Affected equipment is anticipated to be operated by the existing labor pool in southern California and would not warrant any new housing.

Based upon these considerations, significant adverse population and housing impacts are not expected from the implementation of PR 1153.1 and will not be further evaluated in the Draft EA. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
--	--------------------------------------	--	------------------------------------	-----------

XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

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

Discussion

XIV. a) & b) Adoption of PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. Since the proposed rule primarily affects existing equipment, PR 1153.1 will not require additional public services beyond what is currently required by Rule 1147. The proposed project does not require any action which would alter and, thereby, adversely affect existing public services, or require an increase in governmental facilities or services to support the affected existing facilities. Current fire, police and emergency services are adequate to serve existing facilities, and the proposed project will 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 because no change in operations is expected to occur at affected facilities.

Because the proposed project does not require or involve the use of new hazardous materials or generate new hazardous waste, it will not generate an emergency situation that would require additional fire or police protection, or impact acceptable service ratios or response times.

XIV. c) & d) As indicated in discussion under item XIII. Population and Housing, implementing PR 1153.1 would not induce population growth or dispersion because no additional workers are expected to be needed at the existing affected facilities. Therefore, with no increase in local population anticipated as a result of adopting and implementing PR 1153.1, additional demand for new or expanded schools or parks is also not anticipated. As a result, no significant adverse impacts are expected to local schools or parks.

Based upon these considerations, significant adverse public services impacts are not expected from the implementation of PR 1153.1 and will not be further evaluated in the Draft EA. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

Impacts to recreation will be considered significant if:

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

Discussion

XV. a) & b) As discussed under “Land Use and Planning” above, there are no provisions in PR 1153.1 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 would be altered by the adoption of PR 1153.1, which only affect food oven, roaster and smokehouse operations. Further, PR 1153.1 would not affect in any way district population growth or distribution (see Section XIII), in ways that could increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse

physical effect on the environment because it would not directly or indirectly increase or redistribute population.

Based upon these considerations, significant recreation impacts are not expected from the implementation of PR 1153.1. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

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

Significance Criteria

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

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

Discussion

XVI. a) & b) Adoption of PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses.

PR 1153.1 is expected to require the replacement of burner equipment at affected facilities that could generate waste, however, the impacts would not be beyond what is currently required in Rule 1147; therefore, no new solid or hazardous waste impacts specifically associated with PR 1153.1 are expected. The affected facilities are currently primarily in compliance with the proposed rule, and as a result, no substantial change in the amount of solid or hazardous waste streams is expected to occur. The character of solid or hazardous waste streams are not expected to change as a result of the adoption of PR 1153.1. PR 1153.1 is not expected to increase the volume of solid or hazardous wastes from affected facilities, require additional waste disposal capacity, or generate waste that does not meet applicable local, state, or federal regulations. With regard to potential wastewater impacts, please see the discussion under item IX., "Hydrology and Water Quality."

Based upon these considerations, PR 1153.1 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, adopting PR 1153.1 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations. Since no solid/hazardous waste impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC.				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

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

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection’s volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- 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) Adoption of PR 1153.1 would implement higher NOx emission limits, delay compliance dates, provide an exemption for small/low use units, and provide alternate compliance plans and mitigation fee options for food ovens, roasters and smokehouses. The adoption of PR 1153.1 would not change or cause additional transportation demands or services because no change in operations at affected facilities is expected to occur beyond what is currently required by Rule 1147. Therefore, the proposed project would not increase traffic or adversely impact the existing traffic load and capacity of the street system, as the amount of product to be delivered is not anticipated to change nor generate additional services to affect transportation demand. Because the current existing facilities are primarily in compliance with the proposed rule, no increase in material delivery trips is expected as a result of the proposed project.

Since no construction-related trips and no additional operational-related trips per facility are anticipated, the adoption of PR 1153.1 is not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected

facilities. Since no construction is required, no significant construction traffic impacts are anticipated.

XVII. c) PR 1153.1 will not require operators of existing facilities to construct buildings or other structures or change the height and appearance of the existing structures, such that they could interfere with flight patterns. Therefore, adoption of PR 1153.1 is not expected to adversely affect air traffic patterns. Further, PR 1153.1 will not affect in any way air traffic in the region because it will not require transport of any PR 1153.1 materials by air.

XVII. d) No physical modifications are expected to occur by adopting PR 1153.1 at the affected facilities. Additionally, no offsite modifications to roadways are anticipated for the proposed project that would result in an additional design hazard or incompatible uses.

XVII. e) Equipment replacements or retrofits associated with adopting PR 1153.1 are not expected to occur at the potentially affected existing facilities. Therefore, no changes to emergency access at or in the vicinity of the affected facilities would be expected. As a result, PR 1153.1 is not expected to adversely impact emergency access.

XVII. f) No changes to the parking capacity at or in the vicinity of the affected facilities are expected with adopting PR 1153.1. Adoption of PR 1153.1 does not change existing operations, so no new workers at affected facilities or area sources are expected. Since adoption of PR 1153.1 is not expected to require additional workers, no traffic impacts are expected to occur and additional parking capacity will not be required. Therefore, PR 1153.1 is not expected to adversely impact on- or off-site parking capacity. PR 1153.1 has no provisions that would conflict with alternative transportation, such as bus turnouts, bicycle racks, et cetera.

Based upon these considerations, PR 1153.1 is not expected to generate significant adverse project-specific or cumulative transportation/traffic impacts and, therefore, this topic will not be considered further. Since no significant transportation/traffic impacts were identified, no mitigation measures are necessary or required.

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

XVIII. a) As discussed in the “Biological Resources” section, PR 1153.1 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because PR 1153.1 affects food oven, roaster and smokehouse operations, which are primarily conducted at existing established facilities. The installation of new equipment is anticipated to occur at existing affected facilities, but not beyond what is currently required by Rule 1147. In addition, all of the currently affected facilities are located at sites that have already been greatly disturbed and that currently do not support such habitats. PR 1153.1 is not expected to induce construction of any new land use projects that could affect biological resources.

XVIII. b) Based on the foregoing analyses, some project-specific significant adverse environmental impacts in the answers for air quality are marked significant for project-specific adverse impacts (see checklist in section III). The incremental effects of the proposed project for air quality answers marked potentially significant are not known at this time and will be evaluated for project-specific and cumulative adverse effects in the Draft EA. Therefore, air quality answers checked potentially significant for project-specific adverse impacts are potentially significant for cumulative adverse impacts.

No environmental topics were answered ‘Less Than Significant Impact’ or ‘Less Than Significant with Mitigation’. The environmental topics with ‘No Impact’ include aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid/hazardous waste, and transportation and traffic (see checklists in sections I., II., IV., V., VI., VII., VIII., IX., X., XI., XII., XIII., XIV., XV., XVI., and XVII.). SCAQMD significance thresholds are the same for project-specific impacts and cumulative impacts; therefore, environmental topic answers that are checked ‘No Impact’ for project-specific impacts would not be expected to make any contribution to potential cumulative impacts whatsoever. Therefore, environmental topic answered ‘No Impact’ for project-specific impacts are not expected to be significant for cumulative adverse impacts; therefore, no mitigation is necessary. Therefore, these topics will not be evaluated further in the Draft EA.

XVIII. c) Some air quality adverse impacts from implementing PR 1153.1 were identified as potentially significant and will be evaluated in the Draft EA (see checklist in section III.). The direct and indirect adverse effects upon human beings for these potentially significant adverse impacts will be evaluated in the Draft EA.

As discussed in items I through XVII above (with the exception of section III.), the proposed project would have no potential to cause significant adverse environmental effects in these topic areas.

APPENDIX A

PROPOSED RULE 1153.1

RULE 1153.1 EMISSIONS OF OXIDES OF NITROGEN FROM COMMERCIAL FOOD OVENS

(a) Purpose and Applicability

The purpose of this rule is to reduce nitrogen oxide emissions from gaseous and liquid fuel-fired combustion equipment as defined in this rule. This rule applies to in-use ovens, dryers, smokers, and roasters with nitrogen oxide emissions from fuel combustion that require a South Coast Air Quality Management District permit and are used to prepare food or beverages for human consumption. This rule does not apply to solid fuel-fired combustion equipment, fryers, char broilers, or boilers, water heaters, thermal fluid heaters, and process heaters subject to District Rules 1146, 1146.1, or 1146.2.

(b) Definitions

- (1) ANNUAL HEAT INPUT means the amount of heat released by fuels burned in a burner or unit during a calendar year, based on the fuel's higher heating value.
- (2) BTU means British thermal unit or units.
- (3) COMBUSTION MODIFICATION means replacement of a burner, burners, fuel or combustion air delivery systems, or burner control systems.
- (4) COMBUSTION SYSTEM means a specific combination of burner, fuel supply, combustion air supply, and control system components identified in a permit application to the District, application for certification pursuant to subdivision (e) of this rule, or District permit.
- (5) FOOD OVEN means an oven used to heat, cook, dry, or prepare food or beverages for human consumption.
- (6) GASEOUS FUEL means natural gas; compressed natural gas (CNG); liquefied petroleum gasses (LPG), including but not limited to propane and butane; synthetic natural gas (SNG); or other fuels transported by pipeline or containers as a gas or in liquefied form, where the fuel is a gas at ambient temperature and atmospheric pressure.
- (7) HEAT INPUT means the higher heating value of the fuel to the burner or UNIT measured as BTU per hour.

- (8) HEAT OUTPUT means the enthalpy of the working fluid output of a burner or UNIT.
- (9) INFRARED BURNER means a burner with ceramic, metal fiber, sintered metal, or perforated metal flame-holding surface; with more than 50% of the heat output as infrared radiation; that is operated in a manner where the zone including and above the flame-holding surface is red and does not produce observable blue or yellow flames in excess of ½ inch (13 mm) in length; and with a RATED HEAT INPUT CAPACITY per square foot of flame holding surface of 100,000 BTU per hour or less.
- (10) IN-USE UNIT means any UNIT that is demonstrated to the Executive Officer that it was in operation at the current location prior to July 1, 2014.
- (11) NO_x EMISSIONS means the sum of nitrogen oxide and nitrogen dioxide in flue gas, collectively expressed as nitrogen dioxide.
- (12) PROTOCOL means a South Coast Air Quality Management District approved set of test procedures for determining compliance with emission limits for applicable equipment.
- (13) RADIANT TUBE HEATING means an indirect heating system with a tube or tubes; burner(s) that fire(s) within the tube(s); and where heat is transferred by conduction, radiation, and convection from the burner flame and combustion gases to the tube(s) and the heat is then transferred to the process by radiation and convection from the heated tube(s) without any direct contact of process materials with burner flames and combustion gasses.
- (14) RATED HEAT INPUT CAPACITY means the gross HEAT INPUT of the combustion UNIT specified on a permanent rating plate attached by the manufacturer to the device. If the UNIT or COMBUSTION SYSTEM has been altered or modified such that its gross HEAT INPUT is higher or lower than the rated HEAT INPUT capacity specified on the original manufacturer's permanent rating plate, the modified gross HEAT INPUT shall be considered as the RATED HEAT INPUT CAPACITY.
- (15) RESPONSIBLE OFFICIAL means:
 - (A) For a corporation: a president or vice-president of the corporation in charge of a principal business function or a duly authorized person who performs similar policy-making functions for the corporation; or

- (B) For a partnership or sole proprietorship: general partner or proprietor, respectively;
- (C) For a government agency: a duly authorized person.
- (16) ROASTER means an oven used to dry roast nuts, coffee beans, or other plant seeds. ROASTER includes coffee roasting units with an integrated afterburner that is the only heat source, which also provides heat to roast the coffee beans. ROASTER does not include fryers used for oil roasting of nuts or other seeds.
- (17) THERM means 100,000 BTU.
- (18) UNIT means any oven, dryer, smoker, or ROASTER requiring a District permit and used to prepare food or beverages for human consumption. UNIT does not mean any solid fuel-fired combustion equipment; fryer, including fryers used for nut roasting; char broiler; or boiler, water heater, thermal fluid heater, or process heater subject to District Rules 1146, 1146.1, or 1146.2 that provides heat to a UNIT through a heat exchange system.
- (c) Requirements
 - (1) In accordance with the compliance schedule in Table 2, any person owning or operating an in-use unit subject to this rule shall not operate the unit in a manner that exceeds carbon monoxide (CO) emissions of 800 ppm by volume, referenced to 3% oxygen (O₂), and the applicable nitrogen oxide emission limit specified in Table 1.

Table 1 – NO_x Emission Limit

Equipment Category(ies)	NO _x Emission Limit		
	PPM @ 3% O ₂ , dry or Pound/mmBTU heat input		
	Process Temperature		
	≤ 500° F	> 500° F and < 900° F	≥ 900° F
In-use units with only radiant tube heating	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU
Other in-use units	40 ppm or 0.042 lb/mmBTU	60 ppm or 0.073 lb/mmBTU	60 ppm or 0.073 lb/mmBTU

Table 2 – Compliance Schedule for In-Use Units

Equipment Category(ies)	Permit Application Shall be Submitted By	Unit Shall Be in Compliance On and After
Griddle ovens and ovens used solely for making pita bread and manufactured prior to 1994	October 1, 2017	July 1, 2018
Other unit manufactured prior to 1992	October 1, 2015	July 1, 2016
Other unit manufactured between 1992 to 2000	October 1, 2018	July 1, 2019
Any unit manufactured after 2000	October 1 of the year prior to the compliance date	July 1 of the year the unit is 20 years old

- (2) Unit age shall be based on:
 - (A) The original date of manufacture of the unit as determined by:
 - (i) Original manufacturer's identification or rating plate permanently fixed to the equipment. If not available, then;
 - (ii) Invoice from manufacturer or distributor for purchase of equipment. If not available, then;
 - (iii) Information submitted to AQMD with prior permit applications for the specific unit. If not available, then;
 - (iv) Unit shall be deemed by AQMD to be 20 years old.

- (3) In accordance with the schedule in the permit, owners or operators of units shall determine compliance with the emission limit specified in Table 1 pursuant to the provisions of subdivisions (d) or (e) using a District approved test protocol. The test protocol shall be submitted to the District at least 150 days prior to the scheduled test and approved by the District Source Testing Division.

- (4) Identification of Units
 - (A) New Manufactured Units

The manufacturer shall display the model number and the rated heat input capacity of the unit complying with subdivision (c) on a permanent rating plate. The manufacturer shall also display the District certification status on the unit when applicable.
 - (B) Modified Units

The owner or operator of a unit with a combustion modification shall display the modified rated heat input capacity for the unit and

individual burners on new permanent supplemental rating plates installed in an accessible location on the unit and every burner. The gross heat input shall be based on the maximum fuel input corrected for fuel heat content, temperature, and pressure. Gross heat input shall be demonstrated by a calculation based on fuel consumption recorded by an in-line fuel meter by the manufacturer or installer. The permanent rating plates shall include the date the unit and burners were modified and the date any replacement burners were manufactured. If a unit is modified, the rated heat input capacity shall be calculated pursuant to subparagraph (c)(4)(B). The documentation of rated heat input capacity for modified units shall include the name of the company and person modifying the unit, a description of all modifications, the dates the unit was modified, and calculation of rated heat input capacity. The documentation for modified units shall be signed by the highest ranking person modifying the unit.

- (5) The owner or operator shall maintain on site a copy of all documents identifying the unit's rated heat input capacity. The rated heat input capacity shall be identified by a manufacturer's or distributor's manual or invoice and permanent rating plates attached to the unit and individual burners pursuant to subparagraph (c)(4)(B).
- (6) On or after (date of adoption), any person owning or operating a unit subject to this rule shall perform combustion system maintenance in accordance with the manufacturer's schedule and specifications as identified in the manual or other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the manufacturer's, distributor's, installer's, or maintenance company's written maintenance schedule and instructions and retain a record of the maintenance activity for a period of not less than three years. The owner or operator shall maintain on site at the facility where the unit is being operated a copy of the District certification or District approved source test reports, conducted by an independent third party, demonstrating the specific unit complies with the emission limit. The source test report(s) must identify that the source test was conducted pursuant to a District approved protocol. The model and serial numbers of the specified unit

shall clearly be indicated on the source test report(s). The owner or operator shall maintain on the unit in an accessible location a permanent rating plate. The maintenance instructions, maintenance records, and the source test report(s) or District certification shall be made available to the Executive Officer upon request.

- (7) Any person owning or operating a unit subject to this rule complying with an emission limit in Table 1 expressed as pounds per million BTU shall install and maintain in service non-resettable, totalizing, fuel meters for each unit's fuel(s) prior to the compliance determination specified in paragraph (c)(3). Owners or operators of a unit with a combustion system that operates at only one firing rate that complies with an emission limit using pounds per million BTU shall install a non-resettable, totalizing, time or fuel meter for each fuel.
- (8) Unit fuel and electric use meters that require electric power to operate shall be provided a permanent supply of electric power that cannot be unplugged, switched off, or reset except by the main power supply circuit for the building and associated equipment or the unit's safety shut-off switch. Any person operating a unit subject to this rule shall not shut off electric power to a unit meter unless the unit is not operating and is shut down for maintenance or safety.
- (9) **Compliance by Certification**
For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, and upon approval by the Executive Officer, an owner or operator may demonstrate compliance with the emission limit and demonstration requirement of this subdivision by certification granted to the manufacturer for any model of unit or specific combustion system sold for use in the District. Any unit or combustion system certified pursuant to subdivision (e) shall be deemed in compliance with the emission limit in Table 1 and demonstration requirement of this subdivision, unless a District conducted or required source test shows non-compliance.
- (10) **Alternate Compliance Plan**
Owners or operators of facilities with three or more in-use units with compliance dates in the same year or two consecutive years may request a delay and phase-in of the compliance dates in Table 2 for the affected units. The term of the alternate compliance plan shall be no more than 3

years for 3 or 4 units and no more than 5 years for 5 or more units. At least one unit shall comply with the applicable emission limit by July 1 of the first applicable compliance date in Table 2 for the affected units and at least one unit shall comply with the applicable emission limit by July 1 of each year thereafter. The alternate compliance plan shall identify the units included in the plan and a schedule identifying when the compliance determination for each unit will be completed and when each unit will comply with the emission limit. All units must demonstrate compliance with the applicable emission limit of this rule before the end of the term of the alternate compliance plan.

(d) Compliance Determination

- (1) All compliance determinations pursuant to paragraphs (c)(1), (c)(3), (c)(7), (c)(9), (c)(10) and this subdivision shall be calculated:
 - (A) Using a District approved test protocol averaged over a period of at least 15 and no more than 60 consecutive minutes; and
 - (B) After unit start up.

Each compliance determination shall be made in the maximum heat input range at which the unit normally operates. An additional compliance determination shall be made using a heat input of less than 35% of the rated heat input capacity.

For compliance determinations after the initial approved test, the operator is not required to resubmit a protocol for approval if: there is a previously approved protocol and the unit has not been altered in a manner that requires a permit alteration; and rule or permit emission limits have not changed since the previous test.

- (2) All parts per million emission limits specified in subdivision (c) are referenced at 3 percent volume stack gas oxygen on a dry basis.
- (3) Compliance with the NO_x and CO emission limits of subdivision (c) and determination of stack-gas oxygen and carbon dioxide concentrations for this rule shall be determined according to the following procedures:
 - (A) District Source Test Method 100.1 – Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling (March 1989);

- (B) ASTM Method D6522-00 – Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers;
 - (C) United States Environmental Protection Agency Conditional Test Method CTM-030 – Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers;
 - (D) District Source Test Method 7.1 – Determination of Nitrogen Oxide Emissions from Stationary Sources (March 1989);
 - (E) District Source Test Method 10.1 – Carbon Monoxide and Carbon Dioxide by Gas Chromatograph/Non-Dispersive Infrared Detector (GC/NDIR) – Oxygen by Gas Chromatograph-Thermal Conductivity (GC/TCD) (March 1989);
 - (F) Any alternative test method determined approved before the test in writing by the Executive Officers of the District, the California Air Resources Board, and the United States Environmental Protection Agency.
- (4) For any operator who chooses to comply using pound per million BTU, NO_x emissions in pounds per million BTU of heat input shall be calculated using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.
 - (5) Records of source tests shall be maintained on site and made available to District personnel upon request. Emissions determined to exceed any limits established by this rule through the use of any of the test methods specified in subparagraphs (d)(3)(A) through (d)(3)(F) and paragraph (d)(4) shall constitute a violation of this rule.
 - (6) All compliance determinations shall be made using an independent contractor to conduct testing, which is approved by the Executive Officer under the Laboratory Approval Program for the applicable test methods.
 - (7) For equipment with two or more units in series, including afterburners and other VOC, toxics, or PM control equipment subject the SCAQMD Rule 1147, or multiple units with a common exhaust, the owner or operator may

demonstrate compliance with the emission limits in Table 1 by one of the following:

- (A) Test each unit separately and demonstrate each unit’s compliance with the applicable limit; or
- (B) Test only after the last unit in the series and at the end of a common exhaust for multiple units, when all units are operating, and demonstrate that the series of units either meet:
 - (i) The lowest emission limit in Table 1 applicable to any of the units in series; or
 - (ii) A heat input weighted average of all the applicable emission limits in Table 1 using the following calculation.

$$\text{Weighted Limit} = \frac{\sum [(EL_X) * (Q_X)]}{\sum [Q_X]}$$

Where:

X is any and all units or processes

EL_X = emission limit for unit or process X

Q_X = heat input for unit or process X during test

(e) Certification

(1) Unit Certification

For units that do not allow adjustment of the fuel and combustion air for the combustion system by the owner or operator, any manufacturer or distributor that distributes for sale or sells units or combustion systems for use in the District may elect to apply to the Executive Officer to certify such units or combustion systems as compliant with subdivision (c).

(2) Manufacturer Confirmation of Emissions

Any manufacturer’s application to the Executive Officer to certify a model of unit or combustion system as compliant with the emission limit and demonstration requirement of subdivision (c) shall obtain confirmation from an independent contractor that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods prior to applying for certification that each unit model complies with the

applicable requirements of subdivision (c). This confirmation shall be based upon District approved emission tests. A District approved protocol shall be adhered to during the confirmation testing of all units and combustion systems subject to this rule. Emission testing shall comply with the requirements of paragraphs (d)(1) through (d)(6) except emission determinations shall be made at greater than 90% rated heat input capacity and an additional emission determination shall be made at a heat input of less than 35% of the rated heat input capacity.

- (3) When applying for unit(s) or combustion system(s) certification, the manufacturer shall submit to the Executive Officer the following:
 - (A) A statement that the model of unit or combustion system is in compliance with subdivision (c). The statement shall be signed and dated by the manufacturer's responsible official and shall attest to the accuracy of all statements;
 - (B) General Information
 - (i) Name and address of manufacturer;
 - (ii) Brand name, if applicable;
 - (iii) Model number(s), as it appears on the unit or combustion system rating plate(s);
 - (iv) List of all combustion system components; and
 - (v) Rated Heat Input Capacity, gross output of burner(s) and number of burners;
 - (C) A description of each model of unit or combustion system being certified; and
 - (D) A source test report verifying compliance with the applicable emission limit in subdivision (c) for each model to be certified. The source test report shall be prepared by the confirming independent contractor and shall contain all of the elements identified in the District approved Protocol for each unit tested. The source test shall have been conducted no more than ninety (90) days prior to the date of submittal to the Executive Officer.
- (4) When applying for unit or combustion system certification, the manufacturer shall submit the information identified in paragraph (e)(3) no more than ninety (90) days after the date of the source test identified in subparagraph (e)(3)(D) and at least 120 days prior to the date of the

proposed sale and installation of any District certified unit or combustion system.

- (5) The Executive Officer shall certify a unit or combustion system model or models which complies with the provisions of subdivision (c) and of paragraphs (e)(2), (e)(3), and (e)(4).
- (6) Certification status shall be valid for seven years from the date of approval by the Executive Officer. After the seventh year, recertification shall be required by the Executive Officer according to the requirements of paragraphs (e)(2), (e)(3), and (e)(4).

(f) Enforcement

- (1) The Executive Officer may inspect certification records and unit installation, operation, maintenance, repair, combustion system modification, and test records of owners, operators, manufacturers, distributors, retailers, and installers of units located in the District, and conduct such tests as are deemed necessary to ensure compliance with this rule. Tests shall include emission determinations, as specified in paragraphs (d)(1) through (d)(4), (d)(6) and (d)(7).
- (2) An emission determination specified under paragraph (f)(1) that finds emissions in excess of those allowed by this rule or permit conditions shall constitute a violation of this rule.

(g) Exemptions

- (1) The provisions of this rule shall not apply to units:
 - (A) Subject to the nitrogen oxide limits of District Rules 1109, 1110.2, 1111, 1112, 1117, 1121, 1134, 1135, 1146, 1146.1, 1146.2, 1147; or
 - (B) Subject to registration pursuant to District Rule 222; or
 - (C) Located at RECLAIM facilities.
- (2) The provisions of this rule shall not apply to char broilers; fryers, including fryers used for nut or other seed roasting; and emission control equipment including but not limited to afterburners.
- (3) The provisions of paragraphs (c)(1) and (c)(3) of this rule shall not apply to units with daily emissions of 1 pound per day or less as documented by:
 - (A) A rated heat input capacity of less than 325,000 BTU per hour;

- (B) A permit condition that limits emissions to 1 pound per day or less, including but not limited to, fuel usage limit, time of use limit, or process limit that results in emissions of 1 pound per day or less;
 - (C) Daily recordkeeping of unit operation, an installed unit specific non-resettable time meter and the following specified rated heat input capacities operating the specified number of hours every day:
 - (i) Less than or equal to 400,000 BTU per hour and operating less than or equal to 16 hours per day; or
 - (ii) Less than or equal to 800,000 BTU per hour and operating less than or equal to 8 hours per day; or
 - (iii) Less than or equal to 1,200,000 BTU per hour and operating less than or equal to 5 hours per day.
 - (D) Daily recordkeeping of unit use, including but not limited to time records of unit operation using an installed unit specific non-resettable time meter, daily fuel consumption, and daily process rate.
- (4) The provisions of paragraph (c)(3) of this rule shall not apply to units heated solely with infrared burners.
- (h) Mitigation Fee Compliance Option
- (1) An owner or operator of a unit may elect to delay the applicable compliance date in Table 2 three years by submitting an alternate compliance plan and paying an emissions mitigation fee to the District in lieu of meeting the applicable NO_x emission limit in Table 1.
 - (2) Compliance Demonstration
An owner or operator of a unit electing to comply with the mitigation fee compliance option shall:
 - (A) Submit an alternate compliance plan and pay the mitigation fee to the Executive Officer at least 150 days prior to the applicable compliance date in Table 2, and
 - (B) Maintain on-site a copy of verification of mitigation fee payment and AQMD approval of the alternate compliance plan that shall be made available upon request to AQMD staff.

(3) Plan Submittal

The alternate compliance plan submitted pursuant to paragraphs (h)(1) and (h)(2) shall include:

- (A) A completed AQMD Form 400A with company name, AQMD Facility ID, identification that the application is for a compliance plan (section 7 of form), and identification that the request is for the Rule 1153.1 mitigation fee compliance option (section 9 of the form);
- (B) Attached documentation of unit fuel use for previous 3 years, description of weekly operating schedule, unit permit ID, unit heat rating (BTU/hour), and fee calculation;
- (C) Filing fee payment; and
- (D) Mitigation fee payment as calculated by Equation 1.

Equation 1:

$$MF = R * (3 \text{ years}) * (L_1 - L_0) * (AF) * (k)$$

Where,

MF = Mitigation fee, \$

R = Fee Rate = \$12.50 per pound (\$6.25 per pound for a small business with 10 or fewer employees and gross annual receipts of \$500,000 or less)

L₁ = Default NO_x emission factor, 0.136 lbs of NO_x/mmBTU for gaseous fuels, and 0.160 lb/mmBTU for fuel oils

L₀ = Applicable NO_x emission limit specified in Table 1 in lbs/mmBTU

AF = Annual average fuel usage of unit for previous 5 years, mmscf/yr for natural gas or gallons for liquid fuel

k = unit conversion for cubic feet of natural gas to BTU = 1,050 BTU/scf, 95,500 BTU/gallon for LPG, and 138,700 BTU/gallon for fuel oil

(4) Rule 1147 Mitigation Fee Plan Submittal

A mitigation fee compliance plan submitted pursuant to District Rule 1147 may be used to comply with the requirements of this paragraph so long as the owner/operator of the unit notifies the Executive Officer at least 150 days prior to the applicable compliance date in Table 2.