South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

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

PROJECT TITLE: **PROPOSED RULE 415 – ODORS FROM RENDERING FACILITIES**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Draft Environmental Assessment (EA) to analyze environmental impacts from the project identified above pursuant to its certified regulatory program (SCAQMD Rule 110). The Draft EA includes a project description and analysis of potential adverse environmental impacts that could be generated from the proposed project. The purpose of this letter and the attached Notice of Completion (NOC) is to allow public agencies and the public the opportunity to obtain, review and comment on the environmental analysis.

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

Comments focusing on issues relative to the environmental analysis for the proposed project will be accepted during a 30-day public review and comment period beginning July 14, 2015, and ending 5 p.m. on August 12, 2015. **Please send any comments to Mr. Jeff Inabinet (c/o Office of Planning, Rule Development, and Area Sources) at the address shown above**. Comments can also be sent via facsimile to (909) 396-3324 or e-mail at jinabinet@aqmd.gov. Mr. Inabinet can be reached by calling (909) 396-2453. Please include the name and phone number of the contact person for your agency. Questions regarding the proposed rule language should be directed to Mr. Bob Gottschalk at (909) 396-2456.

The Public Hearing for the proposed project is scheduled for September 4, 2015. (Note: This public meeting date is subject to change.)

Date: July 10, 2015

Signature: Jillian Wong

Jillian Wong

Title: Program Supervisor

Telephone: (909) 396-3176

Reference: California Code of Regulations, Title 14, §§15085(b), 15105, 15252, and 15372

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

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:
Draft Environmental Assessment (EA) for Proposed Rule 415 – Odors from Rendering Facilities

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

Description of Nature, Purpose, and Beneficiaries of Project:
The South Coast Air Quality Management District (SCAQMD) is developing a rule to reduce odors from facilities conducting rendering operations. Proposed Rule (PR) 415 is the result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to the working group. PR 415 will require existing rendering facilities to enclose certain rendering operations, install odor emission control equipment and carry out best management practices (BMPs). In order to ensure that any potential significant adverse environmental impacts are identified and evaluated and that feasible methods to reduce or avoid any potential significant adverse environmental impacts associated with the proposed project are identified and evaluated, an environmental impact analysis was conducted based on one of the larger facilities that would be subject to the rule as a basis to estimate maximum foreseeable environmental impacts. The estimated construction/operation scenario analyzed was based on information provided by the facility of future construction activities/upgrades to current infrastructure and operation of control equipment/BMPs in order to comply with the proposed rule. The environmental analysis in the Draft EA concluded that this proposed project would not generate any significant adverse environmental impacts.

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

Draft EA and all supporting documentation are available at:	**or by calling:**	**Draft EA is available online by accessing the SCAQMD's website at:**
SCAQMD Headquarters 21865 Copley Drive Diamond Bar, CA 91765	(909) 396-2039	http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects/aqmd-projects---year-2015

The Public Notice of Completion is provided through the following:

☑ Los Angeles Times (July 14, 2015) ☑ SCAQMD Website ☑ SCAQMD Mailing List and Interested Parties

Draft EA Review Period (30-day):
July 14, 2015 – August 12, 2015

Scheduled Public Meeting Dates (subject to change):
SCAQMD Governing Board Hearing: September 4, 2015, 9:00 a.m., SCAQMD Headquarters

Send CEQA Comments to:	**Phone:**	**Email:**	**Fax Number:**
Mr. Jeff Inabinet	(909) 396-2453	jinabinet@aqmd.gov	(909) 396-3324

Direct Questions on the Proposed Rule:	**Phone:**	**Email:**	**Fax Number:**
Mr. Bob Gottschalk	(909) 396-2456	rgottschalk@aqmd.gov	(909) 396-3324

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment:

Proposed Rule 415 – Odors from Rendering Facilities

July 2015

SCAQMD No. 150527JI

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INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977[1] as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin referred to herein as the District. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the District[2]. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP[3]. The SCAQMDs AQMP does not contain any control measures to reduce odors from rendering facilities. PR 415 is a direct result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. In November 2010, the SCAQMD Governing Board approved the CCP. The CCP is an update to the 2000 Air Toxics Control Plan (ATCP) and the 2004 Addendum. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the District, with emphasis on cumulative impacts. The elements of the 2010 CCP include community exposure reduction, community participation, communication and outreach, agency coordination, monitoring and compliance, source-specific programs, and nuisance. SCAQMD staff began implementing the CCP in the pilot study area of Boyle Heights, near rendering facilities in the City of Vernon, by meeting with a stakeholder working group beginning in July 2011. The purpose of this working group was to identify air quality issues of importance to the community in Boyle Heights and surrounding communities. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to the working group and represented a quality of life issue. As a direct result of the CCP pilot study process, SCAQMD staff commenced rulemaking to address these odors in 2014.

The District is given broad authority to regulate air pollution from "all sources, other than emissions from motor vehicles" [Health and Safety Code (H&SC) §40000]. The term "air pollutant" encompasses many air contaminants, including odors [H&SC §39013]. Therefore, the District may regulate to control air pollution, including odors, from PR 415 sources. In addition, the District has authority to adopt such rules as may be "necessary and proper" to execute the powers and duties imposed on the District by law [H&SC §40702].

The District's legal authority to adopt and enforce PR 415, establishing best management practices and requirements to reduce odors from rendering facilities also derives from H&SC §41700, which, in pertinent part, prohibits the discharge of air contaminants causing annoyance to the public. It further prohibits the discharge of air contaminants, such as odors, which "endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property" [H&SC §41700]. The District's authority granted by H&SC 41700 to protect the public's comfort and health and safety provides for the regulation of facilities in order to prevent the discharge of odors that cause nuisance or annoyance to the public.

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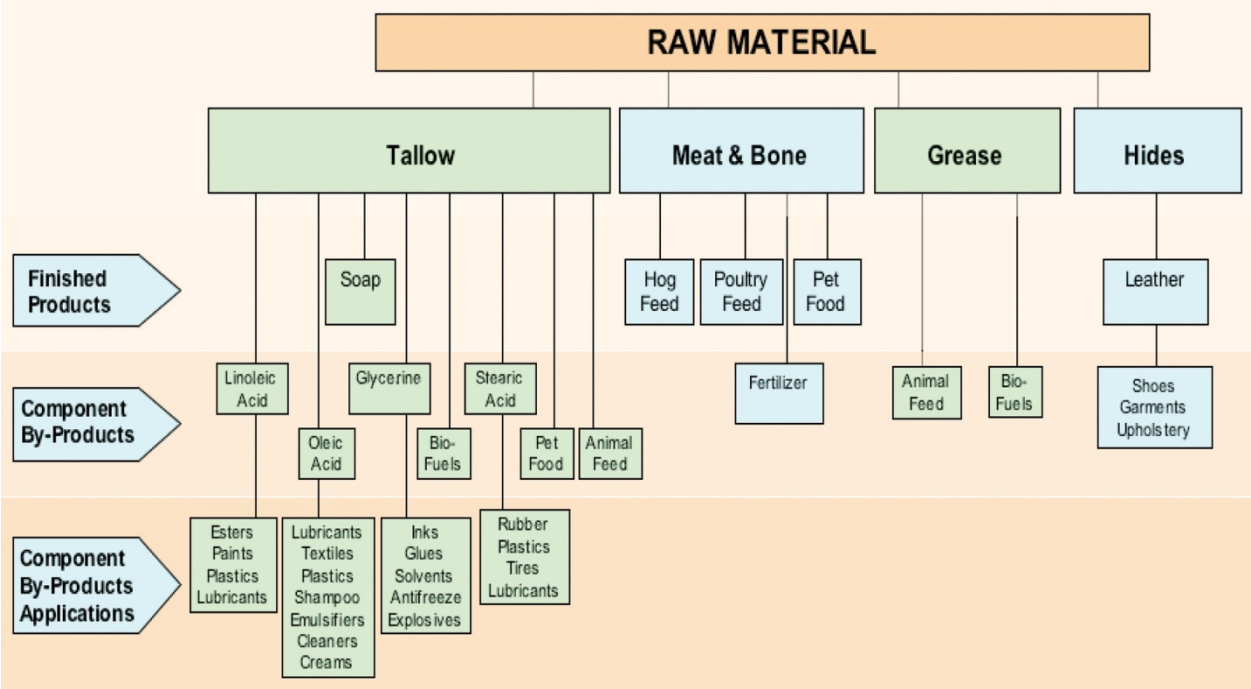
[1] *The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health and Safety Code, §§40400-40540).*

[2] *Health and Safety Code, §40460 (a).*

[3] *Health and Safety Code, §40440 (a).*

In addition, H&SC §40001(b) authorizes the District to adopt rules and regulations, such as PR 415, and provides, in relevant part, for the prevention and abatement of air pollution episodes which cause discomfort or health risks to a significant number of persons.

Proposed Rule (PR) 415 – Odors from Rendering Facilities, is designed to reduce odors from facilities conducting rendering operations. Rendering is a process that converts waste animal tissue into stable, value-added commodities, including fat commodities such as yellow grease, choice white grease, and bleachable fancy tallow, as well as protein commodities, such as meat and bone meal and poultry byproduct meal. Figure 1-1 depicts various commodities and products produced by rendering, including animal feed, fertilizer, biofuels, and cosmetics.



http://www.sec.gov/Archives/edgar/data/916540/000091654010000031/ex99_1.htm

Figure 1-1
Products and By-Products Produced by Rendering Operations

Historically, the SCAQMD has enforced odor nuisance complaints through SCAQMD Rule 402 – Nuisance, which states "a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." This rule incorporates the language of H&SC §41700. The SCAQMD has previously adopted rules to address odors from specific categories of industry. For example, SCAQMD Rule 410 – Odors from Transfer Stations and Material Recovery Facilities, adopted on October 6, 2006, established odor management practices and requirements to reduce odors specifically from municipal solid waste transfer stations and material recovery facilities. Additionally, Rule 472 – Reduction of Animal Matter, adopted May 7, 1976, requires odors from rendering equipment (i.e., cookers,

centrifuges, presses, etc.) to be incinerated or destroyed by an equally effective method. However, Rule 472 does not address odors generated from fugitive sources or wastewater treatment processes associated with the rendering process.

AFFECTED FACILITIES

The proposed rule applies to new and existing facilities that cook raw rendering materials; facilities that process trap grease in addition to rendering, and treatment of wastewater from processes associated with rendering or processing of trap grease at these facilities.

Applicability is to facilities that conduct inedible rendering operations, whether or not these facilities also conduct edible rendering. If an integrated facility conducts both edible and inedible rendering operations, the edible rendering operations are not subject to the requirements of PR 415. Inedible rendering means that the products and by-products of the rendering process are not intended for human consumption.

There are five existing facilities that conduct rendering operations in the Basin. All five are located in Vernon in close proximity to one another, with one straddling the border with the City of Los Angeles. Three of the five facilities are independent rendering operations, one is integrated with a slaughterhouse and meat-packing plant, and one is integrated with a meat-packing plant. Integrated plants operate rendering activities in conjunction with animal slaughter and/or meat processing plants. Because a meat plant typically processes only one animal species (such as cattle, hogs, or poultry), its associated rendering operations likewise handle only the byproducts of that species.

Independent operations usually collect material from other sites using specially designed trucks. They pick up and transport fat and bone trimmings, inedible meat scraps, blood, feathers, and dead animals from meat and poultry slaughterhouses and processors (usually smaller ones without their own rendering operations), farms, ranches, feedlots, animal shelters, restaurants, butchers, and markets. As a result, the majority of independent renderers are likely to handle mixed species. Most of the resulting products of the rendering process from independent facilities are intended for nonhuman consumption (e.g., animal feeds, biofuels, industrial products).

All five facilities would be subject to PR 415. In addition, one planned facility may be subject to the proposed rule if permitted, once it becomes operational.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PR 415 – Odors from Rendering Facilities, is a discretionary action by a public agency, which has potential for resulting in direct or indirect changes to the environment and, therefore, is considered a "project" as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the proposed project and has prepared this draft environmental assessment (EA) with no significant adverse impacts pursuant to its Certified Regulatory Program and SCAQMD Rule 110. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

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

SCAQMD's review of the proposed project shows that the proposed project would not have a significant adverse effect on the environment. Therefore, pursuant to CEQA Guidelines §15252 and 15126.6(f), no alternatives are proposed to avoid or reduce any significant effects because there are no significant adverse impacts, and pursuant to CEQA Guidelines §15126.4(a)(3), mitigation measures are not required for effects not found to be significant. The analysis in the form of the environmental checklist in Chapter 2 supports the conclusion of no significant adverse environmental impacts.

Comments received on the Draft EA during the public comment period and responses to comments will be prepared and included in the Final EA for the proposed project.

PROJECT LOCATION

The potentially affected facilities are located within the SCAQMD jurisdiction. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin is a subarea of the SCAQMD's jurisdiction and is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east (Figure 1-2). Figure 1-3 depicts the location of the five affected rendering facilities.

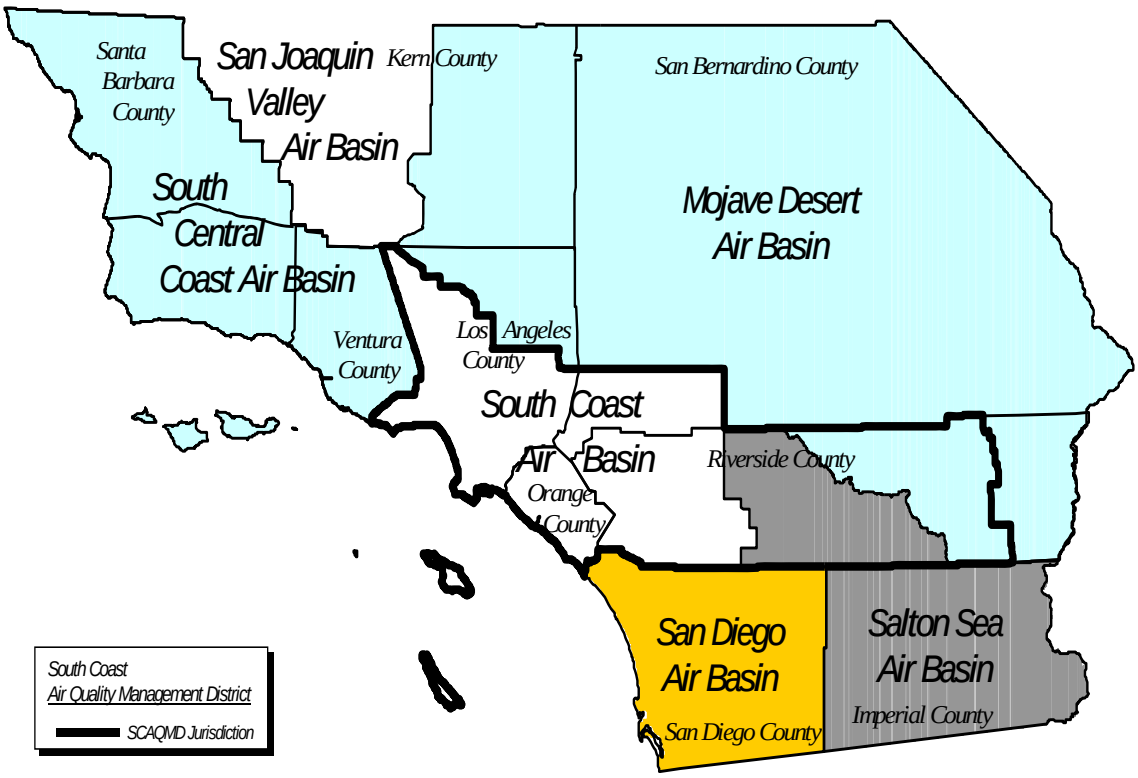


Figure 1-2
Boundaries of the South Coast Air Quality Management District

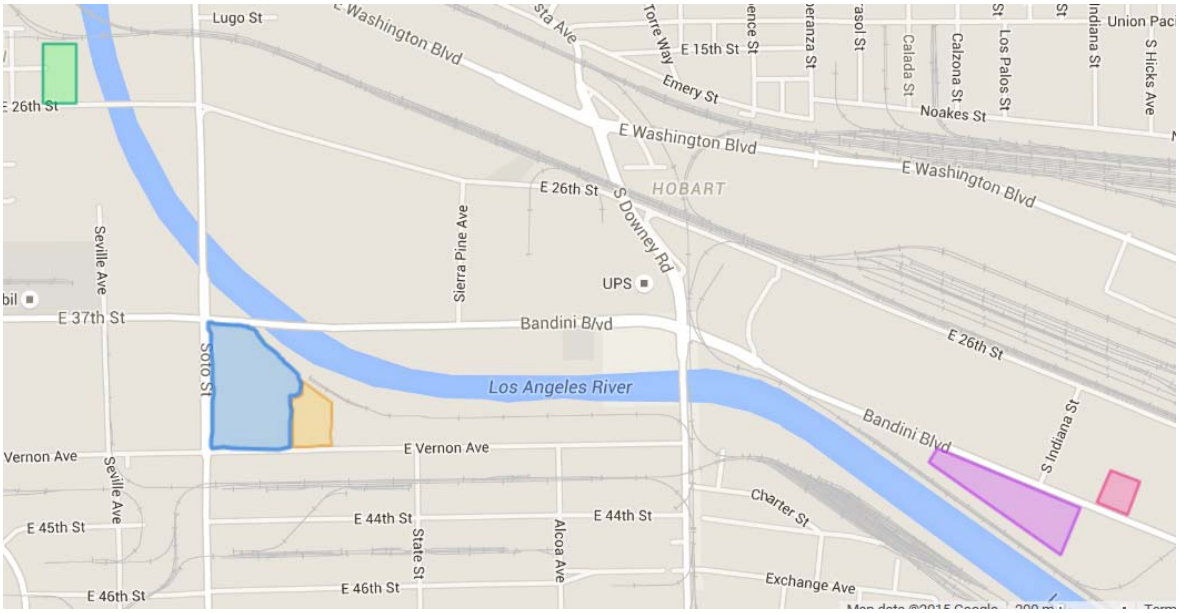


Figure 1-3
Location of Rendering Facilities

PROJECT OBJECTIVE

The objectives of the PR 415 are to:

- Implement near-term solutions, such as odor best management practices (BMPs) and establishment of specific cause analysis for each confirmed odor event;
- establish mid-term solutions, such as installation of odor complaint contact sign near facility entrances, covering of incoming loads of rendering material, and repaving of unloading areas; and
- establish long-term solutions, such as installation of enclosures (under negative pressure) or closed systems for certain processes, installation of odor control equipment, and submission of Odor Mitigation Plans for facilities if ongoing odor issues persist.

PROJECT BACKGROUND

PR 415 is the result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. In November 2010, the SCAQMD Governing Board approved the CCP. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the District, with emphasis on cumulative impacts. The elements of the 2010 CCP are community exposure reduction, community participation, communication and outreach, agency coordination, monitoring and compliance, source-specific programs, and nuisance. SCAQMD staff began implementing the CCP in the pilot study area of Boyle Heights, a community near the City of Vernon rendering facilities, by meeting with a stakeholder working group beginning in July 2011. The purpose of

this working group was to identify air quality issues of importance to the community in Boyle Heights and surrounding communities. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to the working group and represented a quality of life issue. As a direct result of the CCP pilot study process, SCAQMD staff commenced rulemaking in 2014 to address these odors.

The SCAQMD is given broad authority to regulate air pollution from "all sources, other than emissions from motor vehicles" [Health and Safety Code (H&SC) §40000]. The term "air pollutant" includes odors [H&SC §39013]. Therefore, the SCAQMD may establish regulations to control air pollution, including odors, from PR 415 sources. In addition, the SCAQMD has authority to adopt such rules as may be "necessary and proper" to execute the powers and duties imposed on the SCAQMD by law [H&SC §40702]. Rule 415 is intended to prevent and abate violations of H&SC §41700, which prohibits all pollution nuisance.

RENDERING PROCESS OVERVIEW

The Rendering Process

In most facilities, raw materials (including carcasses, slaughter byproducts, etc.) are ground to a uniform size and placed in cookers, which evaporate moisture and free fat from protein and bone. A series of conveyers, presses, and a centrifuge continue the process of separating fat from solids. The finished fat (e.g., tallow, lard, yellow grease) goes into separate tanks, and the solid protein (e.g., meat and bone meal, poultry meal) is pressed into cake for processing into animal feed, fertilizer, or other uses. Other rendering systems that consist of specialized equipment may be used, including those that recover protein solids from slaughterhouse blood or that process used cooking oil from restaurants, including trap grease. This cooking oil is recovered (often in 55-gallon drums) for use as yellow grease in non-human food products like animal feeds.

Typical conveyor system observed at a local rendering facility.

Batch Rendering

A batch cooker is designed to be loaded in discrete batches where the raw materials are processed to a target moisture content percentage. Batch processing times vary due to moisture content of the raw material, and the operator can adjust the temperature of the cooker as needed to achieve the desired moisture content at the end of the cycle. The batch is then unloaded for fat separation. A batch cooker can function as a cooker, dryer, hydrolyzer, or processor.

Continuous Rendering

Note: The numbers in the following description of a continuous rendering process correspond to process points indicated on Figure 1-3 – Schematic Diagram of a Typical Continuous Rendering Process.

In a typical continuous rendering process, raw material from receiving bins (1) is transported from the bins by a conveyor (2) and discharged across a magnet (3) that removes ferrous metal. A raw material grinder (4) then reduces the raw material to a uniform particle size for material handling and improved heat transfer during cooking. The ground raw material is then metered from a bin (5) at a constant rate into a continuous cooker operating at a constant temperature (6).

Typical grinding equipment observed at a local rendering facility.

The continuous cooker is generally heated by boiler steam. The cooker brings raw material to a temperature between 240º and 290ºF, evaporating moisture and freeing fat from protein and bone. A dehydrated slurry of fat and solids is discharged from the continuous cooker and transported to a drainer conveyor (7) that separates liquid fat from solids. Solids from the drainer conveyor are combined with solid discharge from the settling tank (10) and centrifuge

(11) and conveyed via a discharge conveyor (8) to screw presses (9), which mechanically reduce the solids' fat content. Solids discharged from the screw presses as pressed cake (12) are further processed into meal.

The fat removed in the screw presses (9) is pumped to a settling tank (10), along with fat discharged from the drainer conveyor. In the settling tank, heavier bone and protein particles settle to the bottom. Liquid fat from the settling tank is pumped to a centrifuge (11), which removes solid impurities from the fat. The clarified fat is further processed or stored as finished fat[4].

Water vapor exits the continuous cooker (6) through a vapor duct system that generally includes an entrainment trap to separate entrained solids and return them to the cooker. A duct system then transports vapor to a condenser (13). Non-condensable gases are removed from the condenser and routed to an odor control system (not shown). Odorous gases from other parts of the process are also routed to the odor control system through a ductwork system. Figure 1-4 presents a schematic diagram of a typical continuous dry rendering process.

[4] *Essential Rendering – National Renderers Association, 2006, ISBN: 0-9654660-3-5*

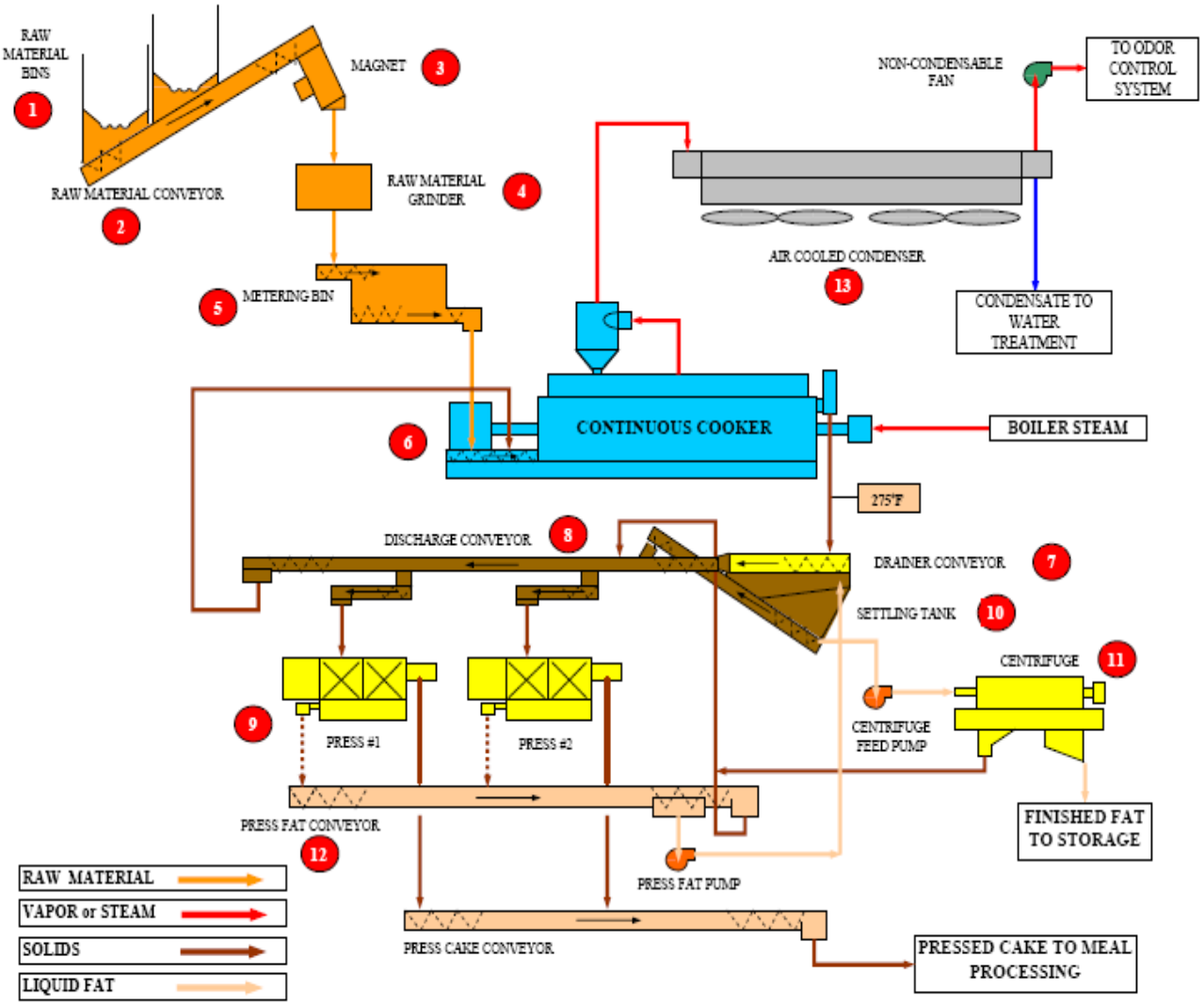


Figure 1-4 – Schematic of Typical Continuous Dry Rendering Process

From Rendering: A Proven Disposal Technology; Hamilton, R. (2003). Kansas City, Missouri: Midwest Regional Carcass Disposal Conference.

Odor control remains one of the rendering industry's greatest challenges. Research in the early 1970s indicated that untreated rendering plant emissions could be detected up to 20 miles away from rendering plants[5]. As for the sheer number of odorous compounds in rendering odors, 110 volatile compounds can be identified in rendering odors, with about 25 contributing most noticeably to rendering plant odors[6]. Most of these organic compounds are generated from the breakdown of proteins and fats during the cooking process[7] or during decay of raw material prior to cooking.

[5] *"Odor Controls for Rendering Plants." Environmental Science and Technology 7 (6):504-510. Bethea, Murthy, Carey; 1973.*
[6] *"Gas Chromatography/Mass Spectrometry Identification of Organic Volatiles Contributing to Rendering Odors." Environmental Science and Technology 16 (12):883-886. Van Langenhove, Van Wassenhove, Coppin, Van Acker, Schamp; 1982*
[7] *http://www.rendermagazine.com/articles/2012-issues/august-2012/development-of-new-odor-control-methods/*

Besides organic compounds, other odor compounds of concern from rendering operations include hydrogen sulfide and ammonia. Because of the wide variety of chemical compounds contributing to rendering plant odors, current strategies for odor control rely on destroying all volatile compounds being emitted. However, the most offensive odor compounds may not necessarily be the most prevalent in a mixture of volatiles[8].

There are several operations and processes within a rendering facility that have noticeable odors associated with them. These include, in no particular order of odor intensity; raw material receiving, raw material size reduction, cooking, fat processing, and wastewater treatment. High intensity odors from the cooker are currently required to be incinerated at 1202^{o}F for at least 0.3 seconds under SCAQMD Rule 472 – Reduction of Animal Matter. Incineration at this temperature is a highly effective odor control method for organic compounds, the composition of most substances in rendering odors.

Since the high intensity odors emitted from the cooking process are already required to be controlled, the nature of odors that continue to be present at a rendering facility from the processes noted are fugitive in nature. There are many points both in a batch cooking process as well as in a continuous cooking process where fugitive odors can escape. Collectively, this large number of sources of fugitive odors can create odors which are emitted from a rendering facility and can travel beyond the facility's property line.

PROJECT DESCRIPTION

SCAQMD staff is developing PR 415 to reduce odors from facilities conducting rendering operations. In general, PR 415 will require existing rendering facilities to enclose certain rendering operations, install odor emission control equipment and carry out best management practices (BMPs). The proposed rule will be implemented in addition to continued enforcement of public nuisances under Rule 402.

Specifically, PR 415 contains the following core requirements for applicable rendering facilities.

- Odor BMPs

  BMPs under PR 415 that will assist in reducing odors from various points or processes within a rendering facility include:

  - Covering of Incoming Transport Vehicles – cover truck bed;
  - Direct Transfer of Raw Rendering Materials – directly into permanent enclosure;
  - Washing of Outgoing Transport Vehicles – prior to leaving facility;
  - Washing of Drums and Containers – prior to leaving facility;
  - Holding Time of Incoming Raw Rendering Materials – no more than 4 hours;
  - Repair of Facility Grounds (applies to receiving areas and where rendering materials come in contact with the ground) – no more than 180 days;

[8] *http://www.rendermagazine.com/articles/2012-issues/august-2012/development-of-new-odor-control-methods/*

- Holding Time of Raw Materials after Size-reduction – no more than 1-hr after grinding;
- Holding Time of Cooked Materials – no more than 1-hr after removing from batch cooker;
- Transfer of Raw or Cooked Rendering Materials between Enclosures – by closed system of conveyance or odor-tight containers;
- Trap Grease Delivery Trucks – in a closed system;
- Venting Trap Grease Delivery Vehicles to Odor Control Equipment – unless truck is unloaded inside a permanent enclosure already vented to odor control equipment;
- Washing of Floor Drains – maintain drains to prevent accumulation of rendering materials;
- Washdown of Receiving Areas – at least once per shift.

It should be noted that the last three BMPs would no longer be required after an existing facility begins operating certain processes within a permanent enclosure or closed system. Since these processes would occur within the permanent enclosure, any odors emitted from these processes would be captured by odor control equipment serving the permanent enclosure.

- Permanent Enclosure / Operate in a Closed System
  - All facilities are required to operate certain odorous processes within a permanent enclosure or within a closed system. This requirement is applicable to new facilities upon startup and to existing facilities within approximately 3 to 4 years after rule adoption (allows for planning and time to obtain necessary permits). Existing facilities are required to submit a permit application to the SCAQMD within 12 months after rule adoption for odor control equipment, to be evaluated in combination with a permanent enclosure.

- Odor Control Equipment
  - All permanent enclosures are required to be ventilated to odor control equipment. The purpose of this requirement is to prevent release of odorous or foul air from a permanent enclosure directly into the environment. The timing for this requirement is the same as the timing for a permanent enclosure – upon startup for new facilities, and within 24 months after a Permit to Construct (P/C) is issued for the combined permanent enclosure/odor control system for existing facilities. An odor control system that treats fugitive odors from inside a permanent enclosure must be designed and operated to maintain a control efficiency of not less than 70 percent for nitrogen compounds and not less than 70 percent for sulfur compounds.

- Wastewater Treatment
  - Certain wastewater treatment processes are required to be enclosed within a permanent enclosure (ventilated to odor control) or operated in a closed system.

This includes screens, skimmers, clarifiers (including dissolved air flotation), settling tanks, sludge dewatering equipment and the outlet of wastewater treatment to the city sewer. An exemption is provided for high dilution wastewater treatment equipment.

- Odor Complaint Contact Sign
  - All rendering facilities are required to display a sign with contact information for area residents and businesses to phone in odor complaints. This requirement is applicable upon startup for new facilities and within 6 months after rule adoption for existing facilities. The sign must list the SCAQMD's 1-800-CUT-SMOG number as the first contact for odor complaints. If desired by the rendering facility owner/operator, a secondary contact at the facility may be listed on the sign.

- Odor Mitigation Plan
  - In the case of pervasive and ongoing odorous emissions from a rendering facility, the owner or operator may be required to submit an Odor Mitigation Plan (OMP). There are two situations that can trigger this requirement, as follows:
    - A Notice of Violation (NOV) is received for Public Nuisance subject to Rule 402;
    - Three or more confirmed odor events are received in a consecutive 180-day period. A confirmed odor event is an odor event that has been verified as coming from a specific source by SCAQMD Compliance personnel after an investigation. It takes at least three complaints from different physical addresses to comprise a confirmed odor event. When an investigation following three or more complaints determines that objectionable odors are being emitted from a particular facility and travelling beyond the property boundary of the facility, that event is determined to be a confirmed odor event.

- Specific Cause Analysis
  - If a facility receives a Rule 402 NOV for public nuisance, or if a confirmed odor event is declared for a facility, an analysis of the specific cause(s) surrounding the NOV (3 verified odor complaints) or odor event must be conducted. The analysis is a process used by a facility subject to this rule to investigate the cause of the confirmed odor event, identify corrective measures needed, and corrective measures taken to prevent recurrence of a similar event.

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

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

GENERAL INFORMATION

Project Title:	Proposed Rule 415 – Odors from Rendering Facilities
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
Rule Contact Person	Mr. Bob Gottschalk (909) 396-2456
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	The SCAQMD is developing a rule to reduce odors from facilities conducting rendering operations. Proposed Rule (PR) 415 is the result of an issue that was identified by the working group for the Clean Communities Plan (CCP) in the pilot study area of Boyle Heights. The prevalence of odors from rendering facilities in Vernon, directly south of Boyle Heights, was of great concern to the working group. PR 415 will require existing rendering facilities to enclose certain rendering operations, install odor emission control equipment and carry out best management practices (BMPs).
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	None

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 "✓" have the potential to be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

☐	Aesthetics	☐	Geology and Soils	☐	Population and Housing
☐	Agriculture and Forestry Resources	☐	Hazards and Hazardous Materials	☐	Public Services
☑	Air Quality and Greenhouse Gas Emissions	☑	Hydrology and Water Quality	☐	Recreation
☐	Biological Resources	☐	Land Use and Planning	☐	Solid/Hazardous Waste
☐	Cultural Resources	☐	Mineral Resources	☐	Transportation/Traffic
☑	Energy	☐	Noise	☐	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: July 10, 2015 Signature: Jillian Wong

Jillian Wong
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As discussed in Chapter 1, the main focus of PR 415 is to reduce odors from facilities conducting rendering operations. In general, PR 415 will require existing rendering facilities to enclose certain rendering operations, install odor emission control equipment and carry out BMPs. The proposed rule will be implemented in addition to continued enforcement of public nuisances under Rule 402.

The objectives of the proposed rule are to:

- implement near-term solutions, such as implementation of odor BMPs and establishment of specific cause analysis for each confirmed odor event;
- establish mid-term solutions, such as installation of odor complaint contact sign near facility entrances, cover incoming truck loads, and repaving of unloading areas; and
- establish long-term solutions, such as installation of enclosures (under negative pressure) or closed systems for certain processes, installation of odor control equipment, and submission of Odor Mitigation Plans for ongoing odor issues.

In order to ensure that any potential significant adverse environmental impacts are identified and evaluated and that feasible methods to reduce or avoid any potential significant adverse environmental impacts associated with the proposed project are identified and evaluated, an environmental impact analysis was conducted based on one of the larger facilities in the current affected facility inventory as a basis to estimate maximum foreseeable impacts. The estimated construction scenario was based on information provided by the facility of future construction activities/upgrades to the current infrastructure in order to comply with the proposed rule. The construction scenario analyzed includes the fabrication of three new enclosure structures and associated trenching/concrete activities for the footings of the new structures, paving of the receiving area, and the installation of three new air pollution control devices (APCDs) (e.g. scrubbers). This particular facility was chosen for the analysis because it required the most construction activities of the five facilities currently in the affected inventory. Therefore, this construction estimate was used as an example for a "worst-case" impact scenario. It is expected that the installation of enclosures, APCDs and paving activities will generate secondary air quality impacts during construction. Newly installed APCDs may also generate potential hydrology and energy impacts from operation. The peak daily emissions vary for each pollutant depending on the construction phase (enclosure construction, paving, APCD installation), which do not overlap in time, as the enclosures would need to be constructed prior to the installation of the APCDs. Specific construction phase durations are included in Appendix C. Other facilities that are anticipated to conduct improvements/modifications as a result of the proposed project are expected to require fewer enclosures, less control devices, and less paving activities than the proposed construction scenario being evaluated. Therefore, any potential adverse impacts from the construction or operation of new modifications at the other affected facilities as a result of the proposed project are expected to be less than the potential adverse impacts for the proposed construction scenario being evaluated. Additionally, the five affected facilities have a total of three years to be in compliance with the proposed rule requirements. Therefore, an overlap of daily construction activities is not expected. However, based on the air quality analysis conducted, even if two facilities performed concurrent construction activities, calculated construction-related emissions would still be less than significant.

		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?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

Significance Criteria

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

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

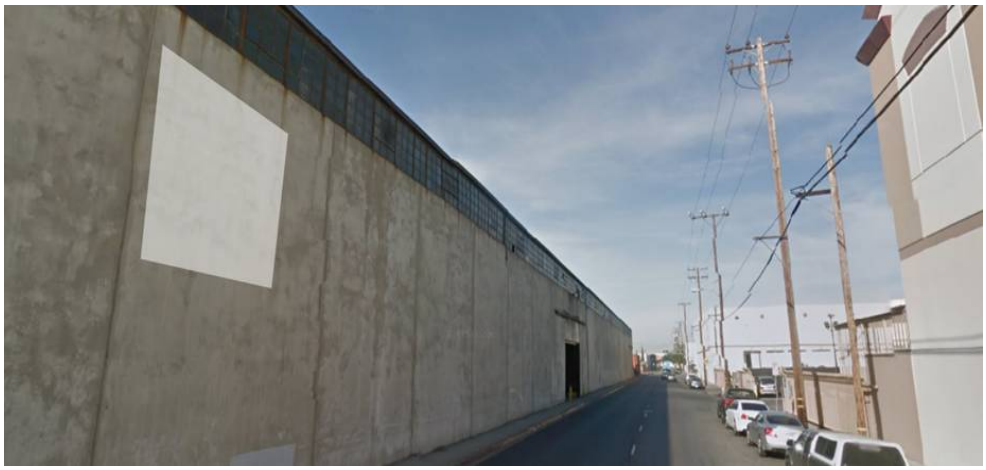
Discussion

I. a), b), c) & d) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs.

The affected rendering facilities are located in the City of Vernon, CA, which is an existing highly industrialized commercial area that does not have any known scenic vistas or scenic resources (see below). The types of enclosures required by PR 415 are not expected to be any larger or visually dissimilar to other structures on the existing facilities or neighboring properties. Since all the affected facilities are located in a highly industrialized setting, the construction of new enclosures or buildings would not obstruct any scenic resources or degrade the existing visual character of any affected site, including but not limited to, trees, rock outcroppings, or historic buildings. Further, the proposed project would not involve the demolition of any existing buildings or facilities (it would rather require enclosing specific operations), require the acquisition of any new land or the surrendering of existing land, or modify any existing land use designations or zoning ordinances. All new enclosures would be developed within the existing footprints of the affected facilities. Thus, the proposed project is not expected to degrade the

visual character of any site or its surroundings from the existing visual character, affect any scenic vista, or damage scenic resources. New enclosures developed at the affected facilities are still expected to comply with any local lighting ordinances for safety purposes. However, since the proposed project would primarily affect already existing developed facilities, it is not expected to create any new source of substantial light or glare.

The following pictures are typical views of the setting in which the affected rendering facilities are located:



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?	☐	☐	☐	☑
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
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))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

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) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs.

Construction of new enclosures or installation of new control equipment as a result of the implementation of the proposed project are expected to take place within the current footprint of existing rendering facilities, which are located within highly urbanized areas that are typically designated as commercial/industrial. Therefore, adoption of 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 potentially affected facilities already completely developed. For the same reasons, the proposed project 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 this 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?	☐	☐	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☐	☑
g) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☑

Air Quality Significance Criteria

To determine whether or not air quality impacts from adopting and implementing the proposed project 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 for SCAQMD lead agency projects.

TABLE 2-1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction** [b]	Operation [c]
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), 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 CO2eq for industrial facilities	
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 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
PM2.5 24-hour average	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation)	
SO2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 $\mu g/m^3$ (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 $\mu g/m^3$ (state) 0.15 $\mu g/m^3$ (federal) 1.5 $\mu g/m^3$ (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 $\mu g/m^3$ = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO2eq = metric tons per year of CO2 equivalents > = greater than

III. a), b) and f) Attainment of the state and federal ambient air quality standards protects sensitive receptors and the public in general from the adverse effects of criteria pollutants which are known to have adverse human health effects. The SCAQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with the SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts (CAA)s, the SCAQMD is required to attain the state and federal ambient air quality standards for all criteria pollutants.

The main focus of PR 415 is to establish odor BMPs and requirements to reduce odors from facilities rendering animals and animal parts. The main requirements of the proposed project are to operate certain odorous processes within a permanent enclosure or within a closed system, ventilate the enclosures to odor control equipment, and implement BMPs for odor control. Implementing the proposed rule amendments do not conflict or obstruct implementation of the AQMP or federal CAA.

Construction Impacts

Construction-related emissions can be distinguished as either onsite or offsite. Onsite emissions generated during construction principally consist of exhaust emissions (NOx, SOx, CO, VOC, and PM10) from the operation of heavy-duty construction equipment, fugitive dust (as PM10) from disturbed soil, and VOC emissions from asphaltic paving and painting. Offsite emissions during the construction phase normally consist of exhaust emissions and entrained paved road dust (as PM10) from worker commute trips, material delivery trips, and haul truck material removal trips to and from the construction site.

Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs.

In order to ensure that any potential significant adverse air quality impacts are identified and evaluated and that feasible methods to reduce or avoid any potential significant adverse air quality impacts associated with the proposed project are identified and evaluated, an environmental impact analysis was conducted using one of the larger facilities in the current affected facility inventory as a basis for estimating maximum foreseeable impacts. The estimated construction scenario was based on information provided by the facility of future construction activities/upgrades to the current infrastructure in order to comply with the proposed rule. The construction scenario analyzed includes:

- fabrication of three new enclosure structures and associated trenching/concrete activities for the footings of the new structures;
- paving of the receiving area;
- installation of three new air pollution control devices (APCDs) (e.g. scrubbers).

This particular facility was chosen for the analysis because it required the most construction activities of the five facilities currently in the affected inventory. Since the five affected facilities have a total of three years to be in compliance with the proposed rule requirements (and one facility is currently close to meeting all of the rule requirements), an overlap of daily construction activities is not expected. Therefore, this construction estimate was used as an example for a "worst-case" impact scenario.

The installation of enclosures, APCDs and paving activities will generate secondary air quality impacts during construction.

Enclosures – Construction Emissions

Table 2-2 depicts the estimated enclosure sizes to be added for the worst-case scenario facility analysis.

Table 2-2
New Enclosures for Worst-Case Analysis Scenario

Area	Size of Structure (sq. ft.)
Wastewater treatment area	3,500
Secondary processing plant	10,000
Main processing plant	40,000
Receiving area	Included with main processing plant
Material handling building	Included with main processing plant

The CalEEMod™ emissions computer model was run to estimate emissions from the construction of the enclosures listed above. CalEEMod™ is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Table 2-3 summarizes the peak daily construction emissions due to the installation of the new enclosures as part of the worst-case scenario project. A detailed CalEEMod™ construction emissions output spreadsheet including emission estimates and assumptions used in the calculations is provided in Appendix C. Peak daily construction air quality impacts, including the fabrication of the three new structures and associated trenching/concrete activities for the footings of the new structures, as well as paving of the receiving area, have been determined to not exceed any applicable significance thresholds. Since each phase must be entirely completed before the next phase can commence, there would be no overlap of construction phases for the construction of the new enclosures. Additionally, the enclosures are expected to be equipped with high-speed doors and other appropriate building envelope openings in order to ensure that negative pressure is maintained.

Table 2-3
Peak Construction Emissions Due to Construction of New Enclosures for Worst-Case Analysis Scenario

PEAK CONSTRUCTION	VOC	CO	NOx	SOx	PM10	PM2.5
	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
Daily Emissions from Peak Construction Phase*	3.48	27.05	34.99	0.04	4.79	2.62
SCAQMD CEQA SIGNIFICANCE THRESHOLD	75	550	100	150	150	55
SIGNIFICANT?	NO	NO	NO	NO	NO	NO

*Peak phase (demolition) also lasts for approximately 10 days, substantially reducing the potential for overlapping with the peak phase from another facility in the three year compliance period.

Control Equipment (APCDs) – Construction Emissions

Construction emissions were estimated for the installation of APCDs for the worst-case scenario facility analysis. Table 2-4 depicts the anticipated control equipment needed to comply with the requirements of the proposed rule. The installation of these APCDs was evaluated to determine the potential for significant environmental impacts at the largest affected facility for the worst-case scenario facility analysis.

Table 2-4
New Control Equipment for Worst-Case Analysis Scenario

Area	Control Equipment
Wastewater treatment area	1 scrubber
Secondary processing plant	1 scrubber
Main processing plant	2 scrubbers
Receiving area	Included with Main processing plant
Material handling building	Included with Main processing plant

The type of construction-related activities attributable to installing control equipment would consist predominantly of cutting, welding, etc, since most control equipment is manufactured off-site and brought to the location. For the purposes of this analysis, construction activities undertaken to install the APCDs are anticipated to entail the use of portable equipment (e.g., generators and compressors) and hand held equipment by small construction crews to weld, cut, and grind metal structures. Additionally, criteria pollutant emissions were calculated for all on-road vehicles transporting workers, vendors, and material removal and delivery associated with the control equipment.

To analyze the "worst-case" emissions from construction activities associated with the installation of the APCDs, SCAQMD staff assumed that two APCDs could be installed at any given time for the worst-case scenario facility analysis. It is expected that the facility would not completely shut down operations for the installation of APCDs at all three required locations at the same time. Therefore, it is likely that only one APCD would be installed at a time. However, to conduct a more conservative analysis, the CalEEMod™ model was run using a scenario of installing two APCDs at any given time. The SCAQMD staff assumed that the maximum daily emissions from construction-related activities for each phase would all occur on the same day. Table 2-5 presents the results of the SCAQMD's construction air quality analysis.

Spreadsheets with the results and assumptions used for this analysis are included in Appendices B and C.

Table 2-5
Peak Construction Emissions Due to Installation of New APCDs for Worst-Case Analysis Scenario

PEAK CONSTRUCTION	VOC	CO	NOx	SOx	PM10	PM2.5
	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
Total Project Emissions	3.20	16.37	20.90	0.026	1.61	1.43
SCAQMD CEQA SIGNIFICANCE THRESHOLD	75	550	100	150	150	55
SIGNIFICANT?	NO	NO	NO	NO	NO	NO

It should be noted that the analysis of construction air quality impacts was a "worst-case" analysis because it assumes that the peak construction would occur from the worst-case scenario facility that had the largest footprint and size of enclosures to construct and the most APCDs to install. There are a number of factors that would preclude concurrent construction activities including: availability of construction crews, type and size of control equipment to be constructed, engineering time necessary to plan and design the control equipment, permitting constraints, etc. Furthermore, as a "worst-case," the SCAQMD's air quality impacts analysis assumes that construction could take up to two months to complete. Depending on the actual enclosure construction schedule and the type and size of the control equipment to be constructed, actual construction time could be substantially less than two months. Construction emissions at the worst-case analysis scenario facility would not exceed any of the significance thresholds identified in Tables 2-3 and 2-5. Finally, once construction is complete, construction air quality impacts would cease. Moreover, since peak-day emissions are substantially smaller than SCAQMD significance thresholds, impacts will still not be significant even if more than one facility were under construction at the same time.

The peak daily emissions vary for each pollutant depending on the construction phase, which do not overlap in time, as the enclosures would need to be constructed prior to the installation of the APCDs. Those peaks are presented in Appendix C. The significance determination for the construction is based on the peak daily emissions during any construction phase. Therefore, all of the construction impacts from the project are not significant for criteria pollutant emissions.

Localized Significance Thresholds for Construction

The localized significance threshold (LST) methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with proposed projects. A search was conducted for any potential sensitive receptors that may be located within 1/4-mile of any currently known affected facility.

Table 2-6
Residential Receptor Distance

Affected Facility Address	Residential Receptor Distance (feet)
4020 Bandini Boulevard	2,500
2626 E. 25th Street	3,300
3049 E. Vernon Avenue	4,800
4105 Bandini Boulevard	3,100
3275 E. Vernon Avenue	4,800

There are no sensitive receptors within 1/4-mile of the currently affected facilities, and therefore, no further LST analysis is needed.

Additionally, a screening health risk analysis using the most recent guidance from the state Office of Environmental Health Hazard Assessment (OEHHA) was prepared based on the total amount of diesel particulate matter for the facility with the highest estimated construction emissions. Based on this analysis, the health risk from construction diesel exhaust particulate matter is estimated to be less than SCAQMD health risk significance thresholds for both residential and worker receptors. Therefore, health risk impacts from construction are not expected to be significant from this project. Further analysis may be required on a case by case basis once site-specific details are available from each individual project as they are implemented pursuant to this rule.

Operational Impacts- Criteria Pollutants

PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. The worst-case scenario facility analysis would require the installation and operation of four new APCDs. For the purposes of this analysis, it was assumed that scrubbers would be the most reasonably appropriate control equipment to be installed at the new enclosures due to the low concentration and high flow rate of the effluent air. In addition, all facilities would be required to operate negative pressure in the new enclosures which would require a fan or blower to ensure effectiveness.

Wet scrubbers remove both particulate matter and gases from industrial process gas streams. In rendering operations, wet scrubbers are typically used to remove residual airborne organic particulates from rendering processes. Wet scrubbers are capable of 98 percent collection efficiencies for particles as small as 5 microns in size. Two types of scrubbers designed to remove small particulates are the ionizing wet scrubber and the venturi scrubber. In an ionizing wet scrubber, the gas stream first enters a chamber where a high voltage is used to ionize the gas stream. The second chamber is a wet scrubbing chamber, where the ionized particles and gases are attracted to the surface of the chamber and the scrubbing liquid. Larger size particles are removed by water through inertial impaction. A venturi scrubber is another type in which the exhaust stream is passed through a constriction (the venturi) where the scrubbing liquid is sprayed in. The turbulence of the gases at and after the venturi promotes contact of particles with the scrubbing liquid droplets. High particulate matter removal efficiencies for small particles can be achieved with this type of scrubber.

The modified air handling systems (fans/blowers) needed to maintain negative pressure in the new enclosures, as well as the new APCDs, are expected to be powered by electricity, so no new combustion emissions would be generated. Therefore, the implementation of the proposed project is not expected to result in any significant adverse operational air quality impacts.

Additionally, in the unlikely event that it is not economically feasible for an affected facility to continue current operations, a facility could close down and the product normally processed would need to be transported to another facility, thus generating additional vehicle emissions from the transport. However, the affected facilities are located very close to each other, and any additional trips generated would likely be less than a few miles. The closure procedures and possible demolition of a facility could not be predicted at this time since the subsequent operation of the site would be unknown. Thus, attempting to predict impacts from the closure

and any subsequent operation of the facility would be speculative. Moreover, staff has not received evidence demonstrating that compliance would be infeasible for any facility.

Operational Impacts- Toxic Air Contaminants

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

Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. There are no provisions in the rule that would generate any toxic emissions. As a result, there will be no increase in toxic air contaminant emissions due to the proposed project.

III. c) As Lead Agency, the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant[9].

This approach was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the San Diego Air Pollution Control District's (SDAPCD) established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines §15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in *Chula Vista*, here the District has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD significance thresholds. A similar ruling was found in another case, *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899. Here again the court upheld the lead agency's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the Project will not cause a significant unavoidable cumulative contribution to an air quality impact.

Based on the foregoing analysis, project-specific air quality impacts from implementing the proposed project would not exceed air quality significance thresholds (Table 2-1); therefore,

[9] SCAQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4.

based on the above discussion, cumulative impacts are not expected to be significant for air quality. Therefore, potential adverse impacts from the proposed project would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for air quality impacts. Per CEQA Guidelines §15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulative considerable.

III. d) Affected facilities are not expected to increase exposure by sensitive receptors to substantial pollutant concentrations from the implementation of the proposed project for the following reasons: 1) criteria pollutant emissions increases during construction are well below significance thresholds and would not cause localized impacts; 2) there are no provisions in the proposed rule that would cause an affected facility to generate any toxic emissions; and 3) there will be no additional electrical generation facilities needed as a result of the adoption of the proposed project (note: there will be a minimal additional need for power, but the demand, according to the power generators, can be met with existing systems). Therefore, significant adverse air quality impacts to sensitive receptors are not expected from implementing the proposed project.

III. e) The main objective of the proposed rule is to reduce odors from facilities conducting rendering operations. Therefore, no significant odor impacts are expected to result from implementing the proposed project.

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.[10] 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 because 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 shows they can cause increases in local temperatures and local criteria pollutants, which have adverse health effects.[11]

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[10] 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

[11] 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.

The analysis of GHGs is a 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 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 deemed to be cumulatively considerable.

Construction emission calculations were conducted for one of the larger facilities in the current affected facility inventory. This particular facility was chosen for the analysis because it required the most construction activities of the five facilities currently in the affected inventory. Therefore, this construction estimate was used as an example for a "worst-case" impact scenario. Table 2-7 provides the total construction CO_2E emissions that could occur from the installation of enclosures, APCDs and paving activities at the worst-case facility scenario. Detailed GHG calculations can be found in Appendix C. As shown in Table 2-7, GHG emissions generated by construction activities are expected to be relatively small, much less than 10,000 metric tons per year (SCAQMD's GHG significance threshold), and, therefore, not significant.

Table 2-7
Overall CO2 Equivalent (eq) Increases Due to Construction Activities for Worst-Case Analysis Scenario (metric tons/year) [1]

	CO2	**CH4**	**CO2eq**
Annual CO2eq Emission Increases Due to:	lb/day	lb/day	MT/year
Installing New Enclosures and Paving Activities	4,448	0.65	2
Installing New APCDs	2,470	0.39	1.1
		Total	**3.2**

[1] 1 metric ton = 2,205 pounds

Since the proposed project is not expected to generate significant construction-related GHG emissions, and the operational phase of the proposed project is not expected to generate any additional GHG emissions, cumulative GHG adverse impacts from the proposed project are not considered significant or cumulatively considerable.

Indirect GHG and Criteria Pollutant Emissions from Electricity Consumption

Indirect GHG and criteria pollutant emissions are expected from the generation of electricity to operate new equipment that occurs off-site at electricity generating facilities (EGFs). Emissions

from electricity generating facilities at their maximum permitted capacity are already evaluated in the CEQA documents for those projects when they are built or modified. The analysis in Section VI. Energy- b), c) and d) demonstrated that there is sufficient capacity from power providers for the minimal increased electricity consumption from the proposed rule.

Under the SCAQMD Regional Clean Air Incentives Market (RECLAIM) program (that regulates NOx and SOx emissions), EGFs were provided annual allocations of NOx and SOx emissions that typically decline annually. However, the proposed project does require an increase in energy generation and that any increase in emissions from generating additional energy (See Section VI. Energy for impacts) from the EGFs would be required to offset any potential NOx and SOx emission increases under the RECLAIM program and other pollutants under the New Source Review Project. Thus, air quality impacts from energy generation are anticipated to be less than significant impacts.

Conclusion
Based on the preceding evaluation of potential air quality impacts, SCAQMD staff has concluded that the proposed project does not have the potential to generate significant adverse air quality impacts. Since no significant adverse air quality and greenhouse gases impacts were identified, no mitigation measures are necessary or required.

		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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

		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?	☐	☐	☐	☑
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e)	Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Significance Criteria

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

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

Discussion

IV. a), b), c), & d) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. All

construction activities are expected to take place at existing facilities that are already developed. The biological resources have already been disturbed or removed at the existing facilities. As a result, the proposed project would not directly or indirectly affect any new or existing species identified as a candidate, sensitive or special status species, riparian habitat, federally protected wetlands, or migratory corridors. For this same reason, the proposed project is not expected to adversely affect special status plants, animals, or natural communities.

IV. e) & f) The proposed project 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. All construction activities are expected to take place at existing facilities that are already developed. Additionally, the proposed project 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 this Draft EA. Since no significant adverse biological resources impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☐	☑
c)	Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☐	☑
d)	Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☐	☑
e)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	☐	☐	☐	☑

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, cultural significance, or tribal cultural

significance to a community or ethnic or social group or a California Native American tribe.

- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

V. a), b), c), & d) Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. However, all construction activities are expected to take place at existing facilities that are already developed. Any construction of new facilities would not be caused by this rule. Therefore, the construction activities are expected to occur in previously disturbed soils and would not require disturbing native soils that may contain cultural resources.

Since no construction-related activities requiring native soil disturbance would be associated with the implementation of the proposed project, no impacts to historical or cultural resources are anticipated to occur. Further, the proposed project is not expected to require any major physical changes to the environment, which may disturb paleontological or archaeological resources or disturb human remains interred outside of formal cemeteries.

V. e) The proposed project is not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, the proposed project is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. For these reasons, the proposed project is not expected to cause any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074.

It is important to note that as part of releasing this CEQA document for public review and comment, the SCAQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code §21080.3.1 (b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the SCAQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code §21080.3.1 (b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code §21082.3 (a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached [see Public Resources Code §21080.3.2 (b)(1)-(2) and §21080.3.1 (b)(1)].

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

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

Significance Criteria

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

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

Discussion

VI. a) & e) The proposed project does not require any action which would result in any conflict with an adopted energy conservation plan or violation of any energy conservation standard. PR 415 is not expected to conflict with adopted energy conservation plans because existing affected facilities would be expected to continue implementing any existing energy conservation plans.

The proposed project is not expected to cause new development outside of the footprint of the affected facilities. The local jurisdiction or energy utility sets standards (including energy conservation) and zoning guidelines regarding new development and will approve or deny applications for building new equipment at the affected facility.

As a result, the proposed project 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.

VI. b), c) & d) There may be an increase in electricity consumption associated with the new APCDs required for enclosures. Diesel fuel would be consumed by construction equipment and gasoline fuel would be consumed by the construction workers vehicles. The following sections evaluate the various forms of energy sources affected by the proposed project.

Electricity: The modified air handling systems (fans/blowers) needed to maintain negative pressure in the new enclosures, as well as the new APCDs, are expected to be powered by electricity, so no new combustion emissions would be generated. However, additional electricity would be required by the operation of this new equipment. The worst-case scenario facility analysis would require the installation and operation of four new APCDs, as well as three new fans/blowers. For the purposes of this analysis, it was assumed that scrubbers would be the most reasonably appropriate control equipment to be installed at the new enclosures due to the low concentration and high flow rate of the effluent air. The estimated horsepower ratings of this new equipment are presented in Table 2-8.

Table 2-8
Additional Electricity Usage from New APCDs and Negative Pressure Air Handling Equipment for Worst-Case Analysis Scenario

Area	Control Equipment	Estimated Horsepower Rating
Wastewater treatment area (3,500 sq. ft.)	1 scrubber	2
	1 fan/blower	25
Secondary Processing Plant (10,000 sq. ft.)	1 scrubber	6
	1 fan/blower	50
Main processing plant (40,000 sq. ft.)	2 scrubbers	20
	1 fan/blower	200
Receiving area	Included with Main processing plant	N/A
Material handling building	Included with Main processing plant	N/A
	TOTAL	**303**

Based on the estimated ratings of the new control and air handling equipment expected to be installed, approximately 0.23 megawatt/hour or (303 horsepower x megawatt/1,341 horsepower) 2,015 megawatt-hours per year (0.23 megawatt/hour x 24 hour/day x 365 day/year) would be required by the proposed worst-case facility analysis scenario. It should be noted that these electricity usage estimates are based on all of the new control and air handling equipment for this worst-case facility analysis scenario running 24-hours a day, seven days a week, which is considered a conservative worst-case impact scenario.

City of Vernon Gas & Electric and the Los Angeles Department of Water and Power (LADWP) supply electricity to the facilities in the affected inventory. The California Energy Commission (CEC) staff reports that LADWP consumed 25,921 total gigawatt-hours in 2008, with a peak hourly consumption of 5,717 megawatt-hours in 2008. No consumption information was

available for City of Vernon Gas & Electric. The additional 2,015 megawatt-hours annually required to operate the new APCDs and air handling equipment at the worst-case facility analysis scenario would be 0.008 percent of the 2008 consumption of 25,921 gigawatts and the peak consumption of 0.23 megawatt-hours would be 0.00004 percent of the peak 5,717 megawatt-hours consumption. Moreover, if all five facilities operated the same amount of air handling and control equipment as the worst-case scenario facility, the additional 10,075 megawatt-hours (2,015 megawatt-hours x 5 facilities) annually required would be 0.04 percent of the 2008 consumption of 25,921 gigawatts and the peak consumption of 1.15 megawatt-hours (0.23 megawatt-hours x 5 facilities) would be 0.0002 percent of the peak 5,717 megawatt-hours consumption. Therefore, SCAQMD staff concludes that the amount of electricity required to meet the incremental energy demand associated with the proposed rule requirements would not result in a significant adverse electricity energy impact.

Petroleum Fuels: During the construction phases, diesel and gasoline fuel will be consumed in construction equipment and portable construction equipment (e.g., generators and compressors) used to weld, cut, and grind metal structures and by construction workers' vehicles traveling to and from construction sites. To estimate "worst-case" energy impacts associated with the construction phases of the "worst-case" facility analyzed for the proposed project, the SCAQMD staff assumed that portable equipment used to weld, cut, and grind metal structures would be operated up to 500 hours in a year (8 hours per day for 60 days). The details of the construction scenarios are included in Appendix C.

To estimate construction workers' fuel usage per commute round trip, the SCAQMD staff assumed that workers' vehicles would get 20 miles to the gallon and would travel 40 miles round trip to and from the construction site in one day. Table 2-9 lists the projected energy impacts associated with the construction and installation at the two affected facilities at any given time.

Table 2-9
Total Projected Fuel Usage for Construction Activities

Fuel Type	Year 2012 Projected Basin Fuel Demand[a] (mmgal/yr)	Fuel Usage[b] (mmgal/yr)	Total % Above Baseline	Significant?
Diesel	524	0.0014	3.0E-10	No
Gasoline	5,589	0.012	2.1E-12	No

[a] Figures taken from Table 3.3-3 of the 2012 AQMP Final EIR

[b] Estimated peak fuel usage from the implementation of the proposed amendments. Diesel usage estimates are based on portable construction equipment operation. Gasoline usage estimates are derived from workers' vehicle daily trips to and from work.

Once construction is complete, there will not be a need for additional workers or truck trips during operation, so there will be no increased fuel demand during operation.

Based on the above information, the proposed project 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:	☐	☐	☐	☑
	• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☑
	• Strong seismic ground shaking?	☐	☐	☐	☑
	• Seismic–related ground failure, including liquefaction?	☐	☐	☐	☑
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
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?	☐	☐	☐	☑
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑

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 facilities affected by PR 415 are likely to conform with the Uniform Building Code and all other applicable state codes in effect at the time they were constructed.

PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. However, all construction activities are expected to take place at existing facilities that are already developed. Therefore, no major change in geological existing setting is expected. In addition, any new enclosure installed as a result of PR 415 will be expected to comply with any applicable Uniform Building Code requirements. Consequently, the proposed project is not expected to expose persons or property to new 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 the proposed project 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. Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. New subsidence impacts are not anticipated since no major excavation or fill activities are expected to occur at affected facilities. Further, the proposed project does not involve the 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 highly industrial/commercial areas where such features have already been altered or removed. Finally, since adoption of the proposed project 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. Any new facilities that are constructed would not be caused by the proposed rule.

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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☑
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?	☐	☐	☐	☑
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
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?	☐	☐	☐	☑
h)	Significantly increased fire hazard in areas with flammable materials?	☐	☐	☐	☑

Significance Criteria

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

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

Discussion

VIII. a, b) & c) The use of wet scrubbers as APCDs for the proposed enclosure requirement may involve the use of chemical reagents in the make-up water utilized within the unit. Typical chemical reagents used in wet scrubbers include sodium hypochlorite (NaOCl), sodium hydroxide (NaOH), NaOH plus either NaOCl or chlorine (Cl_2) gas, and chlorine dioxide (ClO_2). These reagents are expected to be added periodically to the unit's make-up water in small

quantities. The limited amount of chemical reagents (expected to be under response management plan (RMP) thresholds) required by the new APCD's are expected to be temporarily stored in the affected facilities hazardous materials storage areas until they are needed for use in the wet scrubber units. This limited amount of chemical usage and storage associated with the newly required APCDs are not expected to 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 limited amounts of hazardous materials are currently already utilized at the affected facilities, and the limited use of chemical reagents in the required wet scrubber units is not expected to create a significant new hazard. Additionally, based on the above information, the proposed project will not create a significant hazard to the public or environment through a reasonably foreseeable release of these materials into the environment. Furthermore, any water that is discharged from the wet scrubber units will be required to comply with the facilities' already existing sanitary sewer system discharge requirements.

Build-ups of biological growth in the packed bed sections of wet scrubbers could adversely affect the performance of scrubbers. However, there is a general provision in the proposed rule (as well as most equipment permits) requiring all equipment to be maintained according to manufacturer's specifications, which would eliminate any potential hazards associated with the build-up of biological material.

Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. The proposed project is expected to affect primarily existing facilities that are already developed and are currently operating. Therefore, there is 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.

VIII. d) It is not anticipated that the proposed project will alter in any way how operators of facilities who are affected by PR 415 manage their hazardous wastes. 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 the proposed project would establish procedures to reduce odors from facilities conducting rendering operations and, implementation of the proposed project is not expected to increase or create any new hazardous emissions in general, public/private airports located in close proximity to any affected facility will not be adversely affected. Any new enclosures required by the proposed rule will be constructed at the affected facilities, and therefore, are not expected to be located in any existing flight path. Implementation of the proposed project 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 facilities affected by the proposed project will typically have their own emergency response plans. Any potential

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 the proposed project is not expected to hinder in any way with the above business emergency response plan requirements.

VIII. g) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. The proposed project has no provisions that dictate the use of, or generate any new hazardous material. Since the affected facilities are primarily

located in established industrial/commercial workplace areas where wildlands are typically not prevalent, risk of loss or injury associated with wildland fires is not expected as a result of implementing the proposed project.

VIII. h) Affected 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. The proposed project will not interfere with fire prevention practices.

In conclusion, potentially significant adverse hazard or hazardous material impacts resulting from adopting and implementing the proposed project 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?	☐	☐	☑	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, 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?	☐	☐	☑	☐
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?	☐	☐	☑	☐
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
h)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐

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

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

Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. However, all construction activities are expected to take place at existing facilities that are already developed.

The proposed BMPs do require several washing activities, including the washdown of receiving areas, and the washing of outgoing transport vehicles, drums and containers. However, BMP (e)(4) for washing of drums and containers has been limited such that only drums and containers

that contained raw rendering materials that are open upon exiting the facility are required to be washed. Outgoing trucks are currently required to be washed under 3 CCR §1180.35. Therefore, the minimal amount of water required for the washdown of the receiving areas and of any open drums and containers leaving the facilities is not expected to be near the water demand significance threshold, and therefore would not interfere with any California water policies.

Additional water usage and additional wastewater generation would be associated with the four new scrubbers utilized in the worst-case scenario facility analysis (please see page 2-4 for a description and the rationale of the worst-case scenario facility analysis). The size of the scrubbers expected to be utilized is not known at this time. However, based on permit conditions for an existing scrubber currently being utilized by one of the facilities in the affected facility inventory, this currently utilized scrubber has an influent and effluent rate of five (5) gallons per minute. Therefore, four (4) new scrubbers of this size at the worst-case facility analysis scenario would use an additional 20 gallons per minute, or 28,800 gallons per day. This new amount of expected water usage is well below the significance threshold of 262,820 gallons per day of potable water. Moreover, if all five facilities operated the same amount of scrubbers as the worst-case scenario facility, an additional 144,000 gallons per day would be used, which is still well below the 262,820 gallons per day single facility significance threshold. Therefore, sufficient water supplies are expected to be available to serve the proposed project from existing entitlements and resources without the need for new or expanded entitlements, and the proposed worst-case facility analysis scenario is not expected to be significant for operational water demand.

An estimate for additional water usage and wastewater generated was also calculated for an affected facility to complying with BMPs [(e)(3)]- Washing of Outgoing Trucks, [(e)(4)]- Washing of Drums and Containers, and [(e)(13)]- Cleaning Floor Drains. Please note the assumption for [(e)(12)]- Washdown of Receiving Area, is considered business as usual (i.e. - no additional water usage), since each facility is currently required to wash the receiving area under their permit on the same frequency as under the proposed rule. The following assumptions were used in the estimate:

- Facility personnel will wash continuously for four hours per day to comply with BMPs [(e)(3)], [(e)(4)] and [(e)(13)].
- Hose operates continuously for entire four hour period without ceasing.
- Line pressure is 60 pounds per square inch (psi).
- Hose length is 200 feet
- Hose diameter is nominal ¾-inch.

Using these parameters, the flow rate was calculated to be 11 gallons per minute (gpm). Therefore, the amount of water used and the additional amount of wastewater generated by these three BMPs would be 2,640 gallons per day, per facility (60 minutes/hour and four hours/day). Furthermore, the total amount of amount of water used and the additional amount of wastewater generated by these three BMPs by all five affected facilities would be 13,200 gallons (2,640 gallons x 5). If added to the expected amount of water usage from the additional required APCDs (conservatively estimated to be 144,000 gallons), this new amount of expected water usage (157,200 gallons) is well below the significance threshold of 262,820 gallons per day of potable water.

Based on the above information, amount of additional wastewater is not expected to be a significant increase in the amount that any affected facility is currently permitted to discharge. It is expected that this additional wastewater generation would not be a significant impact on the current wastewater infrastructure.

PR 415 will require existing rendering facilities to enclose certain rendering operations, therefore, potentially causing the installation of new enclosures at affected facilities. The permanent enclosures are expected to be built within the existing footprints of the affected facilities, which are already completely developed with existing storm water collection systems. The addition of one or several enclosures and/or paved areas at the already highly developed affected facilities is not expected to generate a substantial amount of new storm water runoff, and existing storm water collection systems are likely to easily be able to handle the minimal increase in storm water runoff that the newly developed enclosures may generate.

Further, the proposed project 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 in a substantial manner. The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Further, since the BMPs for washing activities involve equipment/containers/surfaces that currently come into contact with rendering materials, there would be no change in the composition of existing wastewater streams from the potentially affected facilities. Additionally, discharge quantities and concentrations would continue to be limited by Los Angeles County Sanitation District requirements. Therefore, the proposed project is not expected to require additional wastewater disposal capacity, violate any water quality standard or wastewater discharge requirements, or otherwise substantially degrade water quality.

IX. a) & f) An additional amount of wastewater generation is expected from the washing activities required by the proposed BMPs and the operation of new APCDs for the newly required enclosures. However, this amount of additional wastewater generation is not expected to be a significant increase in the amount that the worst-case facility analyzed is currently permitted to discharge. It is expected that this additional wastewater generation would not be a significant impact on the current wastewater infrastructure. Further, since the BMPs for washing activities involve equipment/containers/surfaces that currently come into contact with rendering materials, there would be no change in the composition of existing wastewater streams from the potentially affected facilities. Based on the above information, the proposed project is not expected to cause potentially affected facilities to violate any water quality standard or wastewater discharge requirements. The adoption of the proposed project is not expected to have significant adverse water demand or water quality impacts for the following reasons:

- The proposed project does not increase total demand for water by more than 5,000,000 gallons per day (or 262,820 gallons per day of potable water).
- The proposed project does not require construction of new water conveyance infrastructure.

- The proposed project does not create a substantial increase in mass inflow of effluents to public wastewater treatment facilities.
- The proposed project does not result in a substantial degradation of surface water or groundwater quality.
- The proposed project does not result in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The proposed project does not result in alterations to the course or flow of floodwaters.

IX. b) The proposed BMPs do require several washing activities, including the washdown of receiving areas, and the washing of outgoing transport vehicles, drums and containers. However, BMP (e)(4) for washing of drums and containers has been limited such that only drums and containers that contained raw rendering materials that are open upon exiting the facility are required to be washed. Outgoing trucks are currently required to be washed under 3 CCR §1180.35. Additional water usage could also potentially be associated with the installation of new APCDs; however, based on the water demand analysis presented above in the Discussion section, this new potential water demand is expected to be minimal. Therefore, no significant increase to any affected facilities' existing water demand is expected. Because the potential increase in water demand generated by the proposed BMPs and the operation of additional APCDs is expected to be minimal, implementation of the proposed project will not increase demand for, or otherwise affect groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. In addition, implementation of the proposed project will not require new or expanded entitlements. Because the construction activities associated with the proposed project will occur at already existing developed facilities, any additional paving that is required is expected to occur within the footprint of the facilities and is not expected to interfere with groundwater recharge. Therefore, no water demand impacts are expected as the result of implementing the proposed project.

IX. c), d), & e) Implementation of the proposed project will occur at primarily existing facilities that are paved and have drainage infrastructure in place. The permanent enclosures required by PR 415 are expected to be built within the existing footprints of the affected facilities, which are already completely developed with existing storm water collection systems. The addition of one or several enclosures at the already highly developed affected facilities is not expected to generate a substantial amount of new storm water runoff, and existing storm water collection systems are likely to easily be able to handle the minimal increase in storm water runoff that the newly developed enclosures may generate. Therefore, no change to existing storm water runoff, drainage patterns, groundwater characteristics, or flow are expected.

IX. g), h), & i) The proposed project will not require construction of new housing, and all construction activities associated with PR 415 are expected to take place at existing facilities that are already developed. Therefore, the proposed project 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. Further, the proposed project is not expected to require additional operational workers at affected facilities. As a result, the proposed project is not

expected to expose people or structures to significant new flooding risks, or make worse any existing flooding risks. Finally, 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.

The addition of one or several enclosures at the already highly developed affected facilities is not expected to generate a substantial amount of new storm water runoff, and existing storm water collection systems are likely to easily be able to handle the minimal increase in storm water runoff that the newly developed enclosures may generate. Therefore, no new storm water discharge treatment facilities or modifications to existing facilities will be required due to the implementation of the proposed project. Accordingly, the proposed project is not expected to generate significant adverse impacts relative to construction of new storm water drainage facilities.

Based upon these considerations, significant hydrology and water quality impacts are not expected from the implementation of the proposed project 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Implementation of the proposed rule would require construction activities such as the installation

of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. However, since all construction activities are expected to take place at existing facilities that are already developed, implementation of the proposed project will not require or result in physically dividing an established community.

X. b) There are no provisions in the proposed project 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 proposed project. Affected facilities would have to comply with local ordinances and land use requirements. Therefore, as already noted in the discussion under "Biological Resources," the proposed project would not affect any habitat conservation or natural community conservation plans, or 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 project.

Based upon these considerations, significant adverse land use and planning impacts are not expected from the implementation of the proposed project 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?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑

Significance Criteria

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

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

XI. a) & b) There are no provisions in the proposed project 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 only affects existing rendering facilities, the proposed project does not require and would not have any effects on the use of important minerals, such as those described above (with the exception of the use of a minimal amount of gravel and asphalt for limited paving activities), nor would the project result in covering over or otherwise making mineral resources unrecoverable. Therefore, no new demand for mineral resources is expected to occur and no significant adverse mineral resources impacts from implementing the proposed project are anticipated.

Based upon these aforementioned considerations, significant mineral resources impacts are not expected from the implementation of the proposed project. 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?	☐	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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) Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs at already existing rendering facilities. Any construction activities associated with the proposed project that would generate noise are expected to be temporary and would be expected to comply with all applicable local noise ordinances. Any operational requirements imposed by the proposed project would not be expected to generate noise above the existing setting. All of the affected activities are expected to occur at existing facilities. Thus, the proposed project is not expected to expose persons to the generation of excessive noise levels above current 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 the proposed project would continue complying with all existing local noise control laws or ordinances.

XII. b) The proposed project is not anticipated to expose people to or generate excessive groundborne vibration or groundborne noise levels since the construction activities are expected to occur at existing facilities. Based on the type of construction equipment needed, any noise generated by the associated construction activities are expected to be temporary and minor.

XII. c) A permanent increase in ambient noise levels at the affected locations above existing levels is not expected because the proposed project does not contain any operational requirements that would generate additional noise beyond existing levels. Therefore, the existing noise levels are unlikely to change and raise ambient noise levels in the vicinities of affected facilities to above a level of significance in response to implementing the proposed project.

XII. d) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Even if affected locations are located near a public/private airport, there are no new noise impacts expected from any of the existing facilities as a result of the proposed project to affect the operations of the airport. Therefore, the proposed project is not expected to expose people residing or working in the affected facilities vicinities to excessive noise levels. See also the response to item XII.a).

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

	Potentially Significant Impact	Less Than Significant 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)?	☐	☐	☐	☑
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Significance Criteria

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

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

Discussion

XIII. a) Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs. However, it is expected that workers can be drawn from the existing labor pool in southern California. Further, the proposed project is not anticipated to generate any significant effects, either direct or indirect, on the District's population or population distribution as no additional operational workers are anticipated to be required at the affected facilities because additional enclosures and APCDs do not require additional personnel to operate. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing the proposed project. As such, implementation of the proposed project will not result in changes in population densities or induce significant growth in population.

XIII. b) Because the proposed project is primarily located in existing industrial/commercial areas, the proposed project is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people elsewhere.

Based upon these considerations, significant adverse population and housing impacts are not expected from the implementation of the proposed project and are not further evaluated in this

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

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☑
b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) Parks?	☐	☐	☐	☑
e) Other public facilities?	☐	☐	☐	☑

Significance Criteria

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

Discussion

XIV. a) & b) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. Physical changes that are expected to occur because of the proposed project (e.g. installation of enclosures and control equipment) will be located at already existing facilities. All newly installed enclosures and control equipment would be expected to be compliant with fire department standards, therefore, they would not increase the risk of fire to occur. No other physical modifications or changes associated with the proposed project are expected and no flammable substances are necessary to operate rendering equipment. As such, the proposed project will not increase the chances for fires or explosions that could affect local fire

departments. Finally, PR 415 is not expected to increase the need for security at affected facilities, which could adversely affect local police departments. 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), & e) As indicated in discussion under item XIII. Population and Housing, implementing the proposed project would not induce population growth or dispersion because no additional operational workers are expected to be needed at the existing affected facilities and construction workers will be temporary, not permanent, and drawn from the local labor pool. Therefore, with no increase in local population anticipated as a result of adopting and implementing the proposed project, 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 the proposed project and are not further evaluated in this Draft EA. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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" (Section X) above, there are no provisions in the proposed project 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 the proposed project, which only affects already developed rendering facilities. Further, the proposed project would not affect District population growth or distribution (see "Population and Housing"- 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 the proposed project. 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?	☐	☐	☐	☑
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	☐	☐	☐	☑

Significance Criteria

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

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

Discussion

XVI. a) & b) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs. The intent of the proposed rule is to capture and control odors from rendering operations, not cease rendering operations. Rendering operations within the basin are not expected to cease and animal waste is not expected to be diverted to landfills because of the requirements included in PR 415. If a rendering facility is not able to meet the requirements of PR 415, it is reasonably foreseeable to expect that one or more of the other currently existing rendering facilities would have the ability or generate the ability to accept the displaced rendering material, thus not creating an excess build-up of rendering material or animal waste. Staff has not received evidence demonstrating that any facility will be unable to meet the requirements of PR 415.

Therefore, it is not expected that rendering material will be diverted to landfills as a result of the proposed project.

All new enclosures and control equipment are expected to be installed within the currently developed footprint at already existing facilities. Because the newly installed control equipment has a finite lifetime (approximately 20 years), it will ultimately have to be replaced at the end of its useful life. Affected equipment may be refurbished and used elsewhere or the scrap metal or other materials from replaced units has economic value and is expected to be recycled, so any solid or hazardous waste impacts specifically associated with the proposed project are expected to be minor. As a result, no substantial change in the amount or character of solid or hazardous waste streams is expected to occur.

Sanitation districts forecast future landfill capacity and encourage recycling. Any portions of spent control equipment in the future that cannot be recycled are expected to be able to be disposed of in the available landfill capacity. Additionally, any waste generated by construction activities associated with the installation of new enclosures or control equipment is expected to be minor. The proposed project 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.

Based upon these considerations, the proposed project is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity. Further, implementing the proposed project 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?	☐	☐	☐	☑

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
d)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e)	Result in inadequate emergency access?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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 the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. Specifically, PR 415 will require existing rendering facilities to enclose certain rendering operations, install APCDs for the enclosures, and carry out BMPs.

There are 13 BMPs currently proposed in PR 415 that will assist in reducing odors from various points or processes within a rendering facility. Only four of these BMPs involve delivery trucks that could have the potential to adversely affect traffic:

1. Covering of Incoming Transport Vehicles

Transport vehicles delivering raw rendering materials to a rendering facility from offsite locations are not permitted to enter the rendering facility beyond the first point of contact (ex: guard shack or weigh station) unless the cargo area of the vehicle is completely enclosed or fully covered with a tarp.

There is no change to traffic/transportation due to covering the open beds of trucks. Because this requirement only affects the type of trucks that are allowed to enter rendering facilities and not the number of trips, this BMP is not expected to increase the demand for on-site truck parking facilities in any way. Additionally, all of the affected facilities are knowledgeable of where their animal wastes are delivered from and have standing contracts with many of the delivering entities. It is reasonably foreseeable that affected facilities can notify delivering parties of the tarping BMP requirement prior to the actual delivery of animal waste product, therefore, eliminating the need for a return trip to their original location to be tarped.

2. Washing of Outgoing Transport Vehicles

Where raw rendering materials come directly into contact with a delivery truck, the cargo area of any vehicle exiting the rendering facility must be thoroughly washed prior to the truck leaving the facility.

This requirement is expected to be a quick process that consists of hosing down the cargo area of the delivery trucks prior to exiting and is not expected to slow down the delivery/exiting process creating the need for extended on-site truck parking facilities.

3. Trap Grease Delivery Trucks

Trap grease from delivery trucks must be delivered to tankage at the facility and transferred within the trap grease storage and processing area(s) within a closed system, inside of a permanent enclosure, or through a system vented to odor control equipment.

Since this BMP only outlines specific areas that trap grease delivery trucks can be unloaded, this BMP is not expected to delay normal trap grease unloading operations, and therefore does not create the need for extended on-site truck parking facilities or cause any increase in the number of delivery trucks.

4. Venting Trap Grease Delivery Vehicles to Odor Control Equipment

The pressure relief valve on trap grease delivery trucks fitted with an internal vacuum or pressure pump must be vented to odor control equipment operating in good condition prior to unloading of trap grease, unless the truck is unloaded inside of a permanent enclosure.

Since this BMP only requires that trap grease delivery trucks must be vented to odor control equipment prior to unloading, this BMP is not expected to delay normal trap grease unloading operations, and therefore does not create the need for extended on-site truck parking facilities.

Additionally, implementation of the proposed project would not result in a net change or cause additional transportation demands or services. Similarly, the implementation of the proposed project is not expected to adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities.

Implementation of the proposed rule would require construction activities such as the installation of new enclosures and associated trenching/concrete activities for the footings of the new enclosures, paving of receiving areas, and the installation of new APCDs.

To evaluate any potential environmental impacts from construction activities associated with the proposed project, an environmental impact analysis was conducted using one of the larger facilities in the current affected facility inventory as a basis for estimating foreseeable construction impacts. The estimated construction scenario was based on information provided by the facility of future construction activities/upgrades to current infrastructure in order to comply with the proposed rule. The construction scenario analyzed includes the fabrication of three new structures and associated trenching/concrete activities for the footings of the new structures, paving of the receiving area, and the installation of three new APCDs. This particular facility was chosen for the analysis because it required the most construction activities of the five facilities currently in the affected inventory. Therefore, this construction estimate was used as an example for a "worst-case" impact scenario. Due to the large project size, this known project was used as an example for a "worst case" impact scenario. The environmental analysis concluded that construction required by this proposed project would not generate any significant adverse air quality environmental impacts. The detailed results of this air quality analysis are presented in Appendix C – Construction Emissions for Worst-Case Scenario.

Since a limited amount of construction-related trips (see Appendix C) and no additional operational-related trips per facility are anticipated, the adoption of the proposed project is not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities. Since the construction activities required as a result of PR 415 at the affected facilities are not expected to overlap because of the 3 year compliance timeframe, no significant construction traffic impacts are anticipated based on the analysis conducted. Even if all five facilities performed construction at the same time, this would not be expected to generate 350 employees or truck trips.

XVII. c) Adoption of the proposed rule would establish procedures to reduce odors from facilities conducting rendering operations. The proposed project will not require operators of existing facilities to construct buildings or other structures that could interfere with flight patterns, so the height and appearance of the existing structures are not expected to change. Therefore, implementation of the proposed project is not expected to adversely affect air traffic patterns. Further, the proposed project will not affect in any way air traffic in the region because it will not require transport of any materials by air.

XVII. d) No physical modifications to roadways are expected to occur by implementing the proposed project. Therefore, no offsite modifications to roadways are anticipated for the proposed project that would result in an additional design hazard or new incompatible uses.

XVII. e) All potential physical changes caused by implementation of the proposed project are expected to occur within the existing boundaries of the affected facilities. As a result, the proposed project is not expected to adversely impact existing emergency access.

XVII. f) All potential physical changes caused by implementation of the proposed project are expected to occur within the existing boundaries of the affected facilities. No changes to the parking capacity at or in the vicinity of the affected facilities are expected. Therefore, no shortage of parking spaces is expected. Further, the proposed project is not expected to require additional operational workers, so additional parking capacity will not be required. Therefore, the proposed project is not expected to adversely impact on- or off-site parking capacity. The proposed project has no provisions that would conflict with alternative transportation, such as bus turnouts, bicycle racks, et cetera.

Based upon these considerations, the proposed project 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?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☐	☑
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

XVIII. a) As discussed in the "Biological Resources" section, the proposed project is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because any physical modifications that occur as a result of the proposed project are expected to occur at existing rendering facilities that are located in industrial/commercial areas which have already been greatly disturbed and that currently do not support such habitats. Additionally, special status plants, animals, or natural communities are not expected to be found within close proximity to the facilities potentially affected by the proposed project.

XVIII. b) Based on the foregoing analyses, cumulative impacts in conjunction with other projects that may occur concurrently with or subsequent to the proposed project are not expected to adversely impact any environmental topic. Related projects to the currently proposed project include existing and proposed amended rules and regulations, as well as AQMP control measures, which produce emission reductions from most industrial and commercial sectors.

Furthermore, because the proposed project does not generate significant project-specific impacts, cumulative impacts are not considered to be "cumulatively considerable" as defined by CEQA guidelines §15065(a)(3). For example, the environmental topics checked 'No Impact' (e.g., aesthetics, agriculture resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid/hazardous waste and transportation and traffic) would not be expected to make any contribution to potential cumulative impacts whatsoever. Also, in the case of air quality impacts, the net effect of implementing the proposed project with other proposed amended rules and regulations, and AQMP control measures is an overall reduction in District-wide emissions, thus, contributing to the attainment of state and national ambient air quality standards. Therefore, it is concluded that the proposed project has no potential for significant cumulative or cumulatively considerable impacts in any environmental areas.

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

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

APPENDIX A

PROPOSED RULE 415 – ODORS FROM RENDERING FACILITIES

PROPOSED RULE 415: ODORS FROM RENDERING FACILITIES

(a) Purpose

The purpose of this rule is to reduce odors from facilities rendering animals and animal parts.

(b) Applicability

This rule applies to new and existing rendering facilities that process raw rendering materials; and trap grease wastewater associated with rendering or trap grease processing.

(c) Definitions

(1) BATCH COOKER means a cooking vessel used for rendering into which raw rendering material is loaded in discrete batches, cooked and unloaded at the end of the cooking cycle.

(2) CLOSED SYSTEM means a system handling any combination of solids, liquids, vapors, and air at a rendering facility, in which odors are contained within the system. A batch cooker is not a closed system.

(3) COLLECTION CENTER means a receiving area for the temporary storage of animal carcasses, packinghouse waste, or other products, prior to their transportation to a licensed rendering plant or pet food processor.

(4) CONFIRMED ODOR EVENT means the occurrence of an odor resulting in three or more complaints by different individuals from different addresses, and the source of the odor is verified by District personnel trained in odor inspection techniques.

(5) CONTROL EFFICIENCY means the percentage value representing the reduction of odorous compounds in an odor control system. Control efficiency is calculated as the uncontrolled rate minus the controlled rate, divided by the uncontrolled rate, multiplied by 100.

(6) EDIBLE RENDERING means an operation that produces edible fats and protein commodities for human consumption.

(7) ENCLOSURE ENVELOPE means the total surface area of a building directly enclosing rendering operations and includes the enclosure's exterior walls, floor and horizontal projection of the roof on the ground.

(8) EXISTING FACILITY means a facility subject to the requirements of this rule that began operation prior to *(date of adoption).*

(9) FACILITY GROUNDS means any area of operations where rendering materials are transported, stored or handled other than within an enclosure.

(10) FAT COMMODITY means a finished fat product from rendering and derived from animal fat or plant sources.

(11) NEW FACILITY means a facility subject to the requirements of this rule that begins operation on or after *(date of adoption),* or for which permit applications for equipment subject to this rule have not been deemed complete on or before *(date of adoption).*

(12) ODOR means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves.

(13) ODOR CONTROL SYSTEM means equipment serving a permanent enclosure that is designed to reduce odorous emissions captured in the permanent enclosure. Odor control equipment does not mean a closed system.

(14) ODOR GENERATING SOURCE means a process at a rendering facility from which odors may be emitted, including raw material receiving, size reduction, cooking, separation and processing of cooked materials into fat commodities and protein commodities, and wastewater treatment.

(15) PERMANENT ENCLOSURE means an enclosure having a permanently installed roof and exterior walls which are constructed of solid material, and completely surround one or more odor-generating sources such that all odors from processes conducted within the enclosure are contained therein.

(16) PROTEIN COMMODITY means a finished protein produced from rendering and derived from raw rendering materials of either animal or plant origin.

(17) RAW RENDERING MATERIALS means materials introduced into the receiving area at a rendering facility, and may include animal carcasses and parts, packing house cuttings, out-of-date products from grocery stores, blood, viscera, offal, feces and other organic matter generated by food processors.

(18) RECEIVING AREA means the area, tank or pit within a rendering facility where raw rendering materials are unloaded from a transport vehicle, or transferred from another portion of the facility for the purpose of rendering these materials.

(19) RENDERING means operations and processes that convert raw rendering materials into fat commodities and protein commodities by heat and mechanical separation.

(20) RENDERING FACILITY means a facility engaged in rendering operations.

(21) ROUTINE ENCLOSURE OPENING means any of the following areas that may be open during normal operations at facilities subject to this rule, and through which odors have the potential to escape from a permanent enclosure:

(A) Vents for natural or forced-air ventilation, including but not limited to gable vents, eave vents, wall vents and rooftop vents;

(B) Windows, doors and doorways; and

(C) Spaces below metal sheathing that do not reach the foundation.

(22) SPECIFIC CAUSE ANALYSIS means a process used by a facility subject to this rule to investigate the cause of a confirmed odor event, identify corrective measures needed and measures taken or that will be taken to prevent recurrence of a similar event.

(23) TRAP GREASE means cooking grease, food waste, and wastewater from a restaurant grease trap or interceptor.

(24) VENTILATION SYSTEM means an air-handling system serving odor control equipment that is designed and operated to (a) draw air from within a permanent enclosure and deliver it to approved odor control equipment; and (b) maintain negative air pressure through each routine enclosure opening. Ventilation system does not mean a system for heating, ventilation, or air conditioning (HVAC) used for comfort heating or cooling.

(25) WASTEWATER TREATMENT means, for the purpose of this rule, any chemical, biological, or mechanical procedure used to remove, reduce, or neutralize contaminants in water at a rendering facility from rendering- and trap grease-related operations.

(d) Requirements for New and Existing Facilities

(1) Core Requirements for all Facilities

(A) Odor Best Management Practices (BMP)

Upon startup of a new facility, or within 90 days after *(date of adoption)* for an existing facility, all applicable odor BMP identified in subdivision (e) shall be implemented.

(B) Permanent Enclosure or Operation in Closed System

(i) Upon startup for a new facility, equipment and processes listed in paragraph (f)(2) shall not be operated except in a closed system or located within a permanent enclosure subject to subdivision (f).

(ii) Within 12 months after *(date of adoption)* for an existing facility, the owner or operator shall submit permit applications for a permanent enclosure where required under this rule, to be evaluated in combination with odor control equipment complying with the requirements of paragraph (f)(5).

(iii) Equipment and processes subject to paragraphs (f)(1) and (f)(2) shall not be operated 24 months after the date a Permit to Construct is issued to an existing facility for the submittal required under clause (d)(1)(B)(ii), except in a closed system or located within a permanent enclosure.

(C) Ventilation of Permanent Enclosures to Odor Control Equipment

(i) Facility operations shall not be conducted at a new facility unless each required permanent enclosure is exhausted through a ventilation system to odor control equipment that is operating in good condition.

(ii) The owner or operator shall not operate equipment and processes subject to paragraphs (f)(1) and (f)(2) 24 months after the date a Permit to Construct is issued to an existing facility for the submittal required under clause (d)(1)(B)(ii), unless each required permanent enclosure is exhausted through a ventilation system to odor control equipment that is operating in good condition.

(D) Wastewater Treatment

(i) Upon startup for a new facility, equipment and processes listed in subdivision (g) shall not be operated except in a closed system or located within a permanent enclosure subject to subdivision (f).

(ii) The owner or operator of an existing facility shall submit permit applications for a permanent enclosure required under this rule within 12 months after *(date of adoption)*, to be evaluated in combination with odor control equipment complying with the requirements of paragraphs (f)(2) and (f)(3).

(iii) Within 12 months after the date a Permit to Construct for a permanent enclosure in combination with odor control equipment is issued to an existing facility, the owner or operator shall not operate equipment and processes under subdivision (g), except in a closed system or located within a permanent enclosure subject to paragraph (f)(2).

(E) Installation of Odor Complaint Contact Sign at Rendering Facilities

Upon startup for a new facility, or within 6 months after *(date of adoption)* for an existing facility, an odor complaint contact sign shall be installed at each facility subject to this rule, pursuant to the requirements of subdivision (i).

(F) Installation of Signage Requiring Covering of Incoming Trucks

Upon startup for a new facility, or within 6 months after *(date of adoption)* for an existing facility, a sign shall be posted at each truck entrance at a facility subject to this rule requiring all incoming trucks to be enclosed or fully covered.

(G) Notification of Intent to Enclose or Operate in a Closed System

Within 12 months after *(date of adoption)* for an existing facility, the owner or operator shall submit a letter of intent to the Executive Officer stating an intent to either enclose odor-emitting operations and processes within a permanent enclosure or operate them in one or more closed systems, for all equipment and processes subject to paragraph (f)(2) or subdivision (g) that are not located within a permanent enclosure or operated in a closed system as of *(date of adoption)*.

(2) Submittal of Odor Mitigation Plan (OMP).

The owner or operator of a facility shall submit an Odor Mitigation Plan (OMP) to the Executive Officer within 90 days after notification by the Executive Officer, pursuant to the requirements of subdivision (h), if:

(A) The owner or operator of a facility subject to this rule receives a Notice of Violation for Public Nuisance pursuant to Rule 402; or

(B) Three or more confirmed odor events for a facility are received during any consecutive 180-day period.

The owner or operator shall comply with all terms and conditions of their approved Odor Mitigation Plan. A violation of any term of an approved Odor Mitigation Plan is a violation of this rule. Submittal of an Odor Mitigation Plan shall be in addition to any settlement of the Notice of Violation triggering such submittal.

(3) Specific Cause Analysis

Within 1 business day after notification by the Executive Officer of a confirmed odor event for a facility subject to this rule, the owner or operator shall conduct a specific cause analysis and submit a report in the format specified by the Executive Officer within 30 days. The report shall include a description of activities during the time of the odor event, any upset or breakdown conditions at the facility, including potential sources of odors and emission points for all equipment required to be enclosed under paragraph (f)(1) or subdivision (g). In addition, the report must identify any corrective measures taken or that will be taken to prevent recurrence of a similar event.

(4) Recordkeeping

Upon startup for a new facility, or within 30 days for an existing facility, the owner or operator of a facility subject to this rule shall collect and maintain records of all information required under subdivision (j).

(e) Odor Best Management Practices (BMP)

(1) Covering of Incoming Transport Vehicles

Transport vehicles delivering raw rendering materials to a rendering facility from offsite locations shall not be permitted past the first point of contact at a rendering facility for incoming trucks, such as a guard shack or weigh station, unless the cargo area of the vehicle is completely enclosed or fully tarped.

(2) Delivery of Raw Rendering Materials

Subsequent to the date a permanent enclosure is required pursuant to subparagraph (d)(1)(B), raw rendering materials received at a rendering facility shall be transferred from a transport vehicle or other means of

conveyance into a permanent enclosure pursuant to paragraph (f)(3), or into sealed, odor-tight containers on a continuous basis after material delivery, such that material does not remain outside of a permanent enclosure for more than 60 minutes after the end of material delivery;

(3) Washing of Outgoing Transport Vehicles

Where raw rendering materials come directly into contact with a transport vehicle and the cargo area is exposed to the air, the cargo area shall be washed before exiting the facility;

(4) Washing of Drums and Containers

Open drums or containers holding raw rendering materials shall be washed prior to leaving a rendering facility;

(5) Holding Time of Incoming Raw Rendering Materials

Prior to the date a permanent enclosure is required pursuant to subparagraph (d)(1)(B), incoming raw rendering materials shall enter the cooking process, be staged in a permanent enclosure or stored in a sealed, odor-tight container within 4 hours after delivery for material delivered at ambient temperature, or within 6 hours after delivery for material delivered below ambient temperature.

(6) Repair of Raw Material Receiving Area

Notwithstanding the time limit of subparagraph (d)(1)(A), within 180 days after *(date of adoption)*, all areas of broken concrete or asphalt, including but not limited to divots, cracks, potholes and spalling of concrete or asphalt in the raw material receiving area of a rendering facility, or the rendering portion of a facility integrated with a slaughterhouse or meat-packing plant where raw rendering materials are unloaded and touch the ground outside of an enclosure shall be patched, repaired or repaved as necessary to prevent standing water or puddles with a surface area greater than one square foot from accumulating.

(7) Holding Time of Raw Materials after Size-reduction

Within one hour after size-reduction or grinding activities, raw rendering materials at a facility utilizing a batch cooking process shall enter the cooking process, or be staged in a permanent enclosure or stored in a sealed, odor-tight container;

(8) Holding Time of Cooked Materials

Within one hour after being removed from a batch cooker at a rendering facility subject to this rule, cooked materials shall be placed in

downstream processing equipment to be separated into protein and fat commodities or placed in a sealed, odor-tight container for temporary storage;

(9) Transfer of Raw or Cooked Rendering Materials between Enclosures

Raw or cooked rendering materials shall be transported between permanent enclosures only through a closed system of conveyance, or by odor-tight containers.

(10) Delivery Tanker Trucks

Trap grease or other odorous liquid deliveries from delivery tanker trucks shall not be delivered to or transferred within the trap grease storage or processing areas of a rendering facility subject to this rule except through a closed system, within a permanent enclosure, or through a system vented to odor control equipment;

(11) Venting Delivery Tanker Vehicles to Odor Control Equipment

The pressure relief valve on trap grease or other odorous liquid delivery tanker trucks with an internal vacuum or pressure pump shall be vented to odor control equipment operating in good condition prior to unloading of trap grease, unless the truck is unloaded in a permanent enclosure;

(12) Washdown of Receiving Area

Walls, floors, and other surfaces of the receiving area of a rendering facility and any equipment operated in the receiving area, including screw conveyors, pumps, shovels, hoses, etc., shall be thoroughly washed free of animal matter at least once each working day; and

(13) Cleaning Floor Drains

Accessible interior and exterior floor drains shall be maintained in a manner that prevents accumulation.

(f) Permanent Enclosure, Ventilation, Closed System and Odor Control Standards

(1) Subsequent to the date a permanent enclosure is required under subparagraph (d)(1)(B), raw rendering material receiving shall only be conducted within a permanent enclosure.

(2) Subsequent to the date a permanent enclosure is required under subparagraph (d)(1)(B), the following equipment and processes at a rendering facility shall not be operated except in a closed system or located within a permanent enclosure,:

(A) Conveyors associated with raw material transfer operations;

(B) Size reduction and conveying equipment, including but not limited to:
  (i) Breakers;
  (ii) Crushers;
  (iii) Hoggers;
  (iv) Grinders; and
  (v) Conveyors associated with raw rendering material sizing.

(C) Raw rendering material cookers, except batch cookers;

(D) Process equipment for separating rendered fat from protein materials, including but not limited to:
  (i) Centrifuges;
  (ii) Presses;
  (iii) Separators;
  (iv) Pumps;
  (v) Screens;
  (vi) Tanks that are not completely enclosed;
  (vii) Bins and hoppers; and
  (viii) Conveyors used to transport materials between process equipment.

(3) Permanent Enclosure and Ventilation Standards

(A) The combined area of all routine enclosure openings through which odors can escape from a permanent enclosure shall not exceed 5% of the enclosure envelope.

(B) A minimum inward face velocity of not less than 200 feet per minute shall be maintained at all times through each routine enclosure opening of a permanent enclosure.

(C) Minimum inward face velocities for each permanent enclosure shall be determined by placing an anemometer, or an equivalent device approved by the Executive Officer, at the center of the plane of any opening of the permanent enclosure.

(D) Exterior walls of a permanent enclosure shall be constructed of solid material sufficient to withstand the pressure drop created by the inward face velocity of subparagraph (f)(3)(B). Construction shall be of material such as masonary, sheet metal, sheet plastic, wood, metal or aluminum siding, industrial overlapping plastic flap curtains, or other material as approved by the Executive Officer.

(4) Closed System Standards

(A) Each component of a closed system shall be maintained in a manner that minimizes leaks from occurring and prevents odors from escaping from the system, to the maximum extent possible.

(B) Material conveyors and troughs that are components of a closed system shall be completely enclosed on all sides, except for doors or panels for maintenance and personnel access.

(C) Bins and hoppers that are components of a closed system shall be completely enclosed on all sides, except for doors or panels for maintenance and personnel access.

(D) Mating metal surfaces on doors or access panels described under subparagraphs (f)(4)(B) and (f)(4)(C) shall be sealed with gasket material.

(E) Air gaps in components of a closed system shall be sealed with gasket material or with caulk or sealant.

(F) Each section of ductwork containing vapor within a closed system shall be sealed at every connection to other components of the closed system using best industry materials and practices.

(G) Any alternative to a closed system, as defined under subparagraphs (f)(4)(A) though (F) that is proposed by the owner or operator of a facility subject to this rule must be approved by the Executive Officer.

(H) A batch cooker shall not be considered a component of a closed system.

(5) Odor Control System Standards and Testing

An odor control system, designed and operated to control fugitive odors from a permanent enclosure subject to paragraph (f)(3) shall meet the following requirements:

(A) The control efficiency of an odor control device or system serving a permanent enclosure shall not be less than:

(i) 70% for nitrogen compounds.

(ii) 70% for sulfur compounds.

(B) Nitrogen compounds shall be represented by the marker compound ammonia (NH_3), or other alternative marker compound proposed by the owner or operator and subsequently approved by the Executive Officer.

(C) Sulfur compounds shall be represented by the marker compound hydrogen sulfide (H_2S), or other alternative marker compound proposed by the owner or operator and subsequently approved by the Executive Officer.

(D) Within 180 days after the date a permanent enclosure is required under subparagraph (d)(1)(B), an odor control device or system serving a permanent enclosure shall be tested by an independent third-party to determine control efficiency. Testing and analytical methods shall be as follows:

(i) SCAQMD Method 207.1 for ammonia; and

(ii) SCAQMD Method 307 for hydrogen sulfide.

(E) The requirements of this paragraph shall not apply to operating standards or testing of odor control equipment designed and operated to control high intensity odors addressed under Rule 472.

(g) Wastewater Treatment

Subsequent to the date a permanent enclosure is required under subparagraph (d)(1)(B), the following wastewater treatment equipment and processes handling wastewater at a rendering facility, including water used in rendering operations, equipment and area washdown water related to rendering, and water from control equipment related to rendering shall not be operated except in a closed system or located within a permanent enclosure subject to paragraph (f)(3):

(1) Screens;

(2) Skimmers;

(3) Clarifiers, including dissolved air flotation;

(4) Settling tanks;

(5) Sludge dewatering equipment;

(6) Sludge drying equipment; and

(7) The rendering facility treated wastewater outlet to city sewer.

(h) Odor Mitigation Plan (OMP)

(1) An OMP submitted prior to the date a permanent enclosure is required under subparagraph (d)(1)(B) shall address the following:

(A) All facility-specific information below:

(i) Facility name;

(ii) Location address;

(iii) Days and hours of operation;

(iv) Facility ID number;

(v) Mailing address; and

(vi) Title and phone number of person responsible for addressing community complaints received by facility.

(B) Description of odor-emitting areas within the facility;

(C) Configuration of all odor control equipment that exists at the time of OMP submittal, and the equipment, processes and buildings or rooms it serves;

(D) Description of work practices that exist at the time of OMP submittal designed to minimize odors from migrating off the facility property;

(E) Prioritization of odor-emitting areas within the facility, in order of highest-to-lowest odor intensity;

(F) For each odor-emitting area designated in subparagraph (h)(1)(B):

(i) Description of odor mitigation activities proposed to address odor within the odor-emitting area;

(ii) Intent to either enclose an odor-emitting area within a permanent enclosure or operate processes located within the odor-emitting area in one or more closed systems, for all equipment and processes subject to paragraph (f)(2) or subdivision (g) that are not located within a permanent enclosure or operated in a closed system; and

(iii) A detailed construction schedule for each proposed permanent enclosure.

(G) Explanation of why construction and commissioning of proposed permanent enclosures cannot be expedited prior to the date a permanent enclosure is required under subparagraph (d)(1)(B).

(2) An OMP submitted after the date a permanent enclosure is required under subparagraph (d)(1)(B) shall address all information required under subparagraphs (h)(1)(A) through (h)(1)(E) and clause (h)(1)(F)(i).

(3) Approval and Disapproval of an OMP

(A) Within 90 days after submittal of an OMP to the District, the Executive Officer will approve or disapprove the OMP.

(B) The Executive Officer will notify the owner or operator in writing if an OMP is disapproved. If an OMP is disapproved, the owner or

operator shall resubmit the OMP to the Executive Officer within 90 days after notification of disapproval. The resubmitted OMP shall include any information necessary to address deficiencies identified.

(C) The Executive Officer will approve the OMP if it is complete and the Executive Officer concurs that all odor mitigation activities proposed to address odors within the odor-emitting areas at the facility are sufficient to resolve the odor problem that triggered submittal of the OMP.

(D) Failure to submit an OMP within 90 days after notification by the Executive Officer, or failure to have an approved OMP by the date allowed under subparagraph (h)(3)(B) for an OMP that was denied by the Executive Officer and subsequently resubmitted is a violation of this rule.

(4) OMP Plan Fees

An OMP submitted or resubmitted under this subdivision shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees.

(i) Odor Complaint Contact Sign and Tracking of Odor Complaints at Rendering Facilities

(1) An odor complaint contact sign shall specify 1-800-CUT-SMOG as the SCAQMD contact number for odor complaints. The sign may also include the name of a contact person at the rendering facility to call for questions or to whom odor complaints may be reported. The sign shall meet all of the following requirements, unless otherwise approved by the Executive Officer:

(A) The sign shall be installed within 50 feet of the main entrance to the facility;

(B) The dimensions of the sign shall be at least 48 inches wide by 48 inches tall;

(C) Lettering on the sign shall be at least 4 inches tall;

(D) Lettering color shall contrast with the sign background;

(E) The lower edge of the sign shall be located between 6 and 8 feet above grade; and

(F) The sign shall be unobstructed and clearly visible to a person outside the facility property.

(2) Notify the SCAQMD by telephone at 1-800-CUT-SMOG no more than three hours after receiving an odor complaint, after facility personnel became aware of the complaint, or after facility personnel should reasonably have become aware of the complaint.

(j) Recordkeeping Requirements

The owner or operator of a facility subject to the requirements of this rule shall maintain on the premises for at least three years and make available upon request by the Executive Officer the following records:

(1) Records of all readings taken by anemometer to demonstrate compliance with the inward face velocity requirement of subparagraph (f)(3)(b);

(2) A legible written log of all odor complaints received by the rendering facility contact person pursuant to paragraph (i)(1). The odor complaint log shall contain, at a minimum, the following information:

(A) Date and time complaint was received;

(B) Date and time of alleged odors;

(C) Outdoor ambient temperature at time of complaint;

(D) Odor description and intensity (i.e., weak, moderate, strong);

(E) Weather conditions;

(F) Wind speed and direction;

(G) Name and contact phone number of complainant, if provided; and

(H) Determination of cause for odor emissions that generated the complaint, if found.

(k) Exemptions

(1) The following facilities are not subject to Rule 415:

(A) Facilities conducting only edible rendering operations that do not conduct inedible rendering or handle or process trap grease;

(B) Collection centers that do not conduct inedible rendering or handle or process trap grease; and

(C) Facilities that process trap grease but do not conduct inedible animal rendering operations.

(2) Wastewater treatment operations at a facility integrated with a slaughterhouse or meat-packing plant shall not be subject to the enclosure requirement of subdivision (g), provided each volume of rendering wastewater is diluted with more than 40 volumes of wastewater from other

sources within the facility such that after mixing, any wastewater exposed to the atmosphere has an average chemical oxygen demand (COD) lower than 1500 mg/L, based on not less than 5 calendar years of sampling data.

(3) Blood meal processing operations at a facility integrated with a slaughterhouse or meat-packing plant shall not be subject to this rule, provide the operation is conducted in a permanent enclosure operating under negative pressure and meeting the requirements of paragraph (f)(3), and the enclosure is vented to an odor control system meeting the control efficiency requirements under subparagraph (f)(5)(A).

APPENDIX B

PERMANENT ENCLOSURE AND CONTROL DEVICE ESTIMATES FOR AFFECTED FACILITIES

There are currently five facilities that would be subject to the proposed requirements of PR 415. The facilities have been identified as A through E. For Facility A, all rows in the column have been marked "not applicable" because the facility is already meeting (or soon will) the proposed rule requirements.

Enclosure Construction Estimates

	FACILITY				
AREA	**A**	**B**	**C**	**D**	**E**
Wastewater treatment area	N/A	3,500 sq. ft.	N/A	N/A	2,500 sq. ft.
Main processing plant	N/A	40,000 sq. ft.	N/A	Retrofit 9,000 sq.ft.	5,500 sq. ft.
Secondary Processing Plant	N/A	10,000 sq. ft.	N/A	N/A	N/A
Receiving area	N/A	Included with Main processing plant	N/A	9,000 sq.ft.	N/A

Control Equipment Estimates

	FACILITY				
AREA	**A**	**B**	**C**	**D**	**E**
Wastewater treatment area	N/A	1 scrubber	N/A	N/A	1 scrubber
Main processing plant	N/A	2 scrubbers	N/A	1 scrubber	2 scrubbers
Secondary Processing Plant	N/A	1 scrubber	N/A	N/A	N/A
Receiving area	N/A	Included with Main processing plant	N/A	1 scrubber	N/A
Material handling building	N/A	Included with Main processing plant	1 scrubber	N/A	Included with Main processing plant

APPENDIX C

CONSTRUCTION EMISSIONS FOR WORST-CASE ANALYSIS SCENARIO

PR415 Facility Enclosure/Paving

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	53.50	1000sqft	1.23	53,500.00	0
Other Asphalt Surfaces	9.00	1000sqft	0.21	9,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Updated schedule to reflect the demolition of existing structures and building of new structures

Demolition -

Construction Off-road Equipment Mitigation -

Grading - Acres disturbed reflects latest construction schedule

Architectural Coating - No coating is necessary for this project

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	20.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	PhaseEndDate	2/11/2016	2/12/2016
tblConstructionPhase	PhaseEndDate	1/21/2016	2/4/2016
tblConstructionPhase	PhaseStartDate	2/13/2016	2/15/2016
tblConstructionPhase	PhaseStartDate	2/5/2016	2/7/2016
tblConstructionPhase	PhaseStartDate	3/12/2016	3/14/2016
tblConstructionPhase	PhaseStartDate	1/15/2016	1/29/2016
tblGrading	AcresOfGrading	1.88	1.50
tblGrading	AcresOfGrading	2.50	1.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.4834	34.9869	27.0544	0.0442	5.8350	1.8515	7.6865	2.9431	1.7311	4.2304	0.0000	4,447.6179	4,447.6179	0.6496	0.0000	4,461.2587
Total	**3.4834**	**34.9869**	**27.0544**	**0.0442**	**5.8350**	**1.8515**	**7.6865**	**2.9431**	**1.7311**	**4.2304**	**0.0000**	**4,447.6179**	**4,447.6179**	**0.6496**	**0.0000**	**4,461.2587**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.4834	34.9869	27.0544	0.0442	2.9385	1.8515	4.7900	1.3374	1.7311	2.6247	0.0000	4,447.6179	4,447.6179	0.6496	0.0000	4,461.2587
Total	**3.4834**	**34.9869**	**27.0544**	**0.0442**	**2.9385**	**1.8515**	**4.7900**	**1.3374**	**1.7311**	**2.6247**	**0.0000**	**4,447.6179**	**4,447.6179**	**0.6496**	**0.0000**	**4,461.2587**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.64**	**0.00**	**37.68**	**54.56**	**0.00**	**37.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6350	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145
Energy	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877
Mobile	0.5802	1.8787	7.5958	0.0187	1.2592	0.0279	1.2870	0.3364	0.0256	0.3620		1,642.5041	1,642.5041	0.0640		1,643.8485
Total	**2.2166**	**1.8918**	**7.6134**	**0.0188**	**1.2592**	**0.0289**	**1.2880**	**0.3364**	**0.0266**	**0.3630**		**1,658.2100**	**1,658.2100**	**0.0644**	**2.9000e-004**	**1,659.6507**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6350	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145
Energy	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877
Mobile	0.5802	1.8787	7.5958	0.0187	1.2592	0.0279	1.2870	0.3364	0.0256	0.3620		1,642.5041	1,642.5041	0.0640		1,643.8485
Total	**2.2166**	**1.8918**	**7.6134**	**0.0188**	**1.2592**	**0.0289**	**1.2880**	**0.3364**	**0.0266**	**0.3630**		**1,658.2100**	**1,658.2100**	**0.0644**	**2.9000e-004**	**1,659.6507**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Site Preparation	Site Preparation	1/29/2016	2/4/2016	5	5	
3	Grading	Grading	2/7/2016	2/12/2016	5	5	
4	Building Construction	Building Construction	2/15/2016	3/11/2016	5	20	
5	Paving	Paving	3/14/2016	3/18/2016	5	5	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	6.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	243.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	26.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2663	0.0000	5.2663	0.7974	0.0000	0.7974			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328		2,487.1296	2,487.1296	0.6288		2,500.3343
Total	**2.9066**	**28.2579**	**21.4980**	**0.0245**	**5.2663**	**1.7445**	**7.0108**	**0.7974**	**1.6328**	**2.4301**		**2,487.1296**	**2,487.1296**	**0.6288**		**2,500.3343**

3.2 Demolition - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4156	6.6611	4.7114	0.0179	0.4234	0.1057	0.5291	0.1159	0.0973	0.2132		1,805.8587	1,805.8587	0.0128		1,806.1282
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0679	0.8450	1.8400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		154.6296	154.6296	7.9300e-003		154.7962
Total	**0.4700**	**6.7290**	**5.5564**	**0.0198**	**0.5687**	**0.1070**	**0.6757**	**0.1545**	**0.0984**	**0.2529**		**1,960.4883**	**1,960.4883**	**0.0208**		**1,960.9244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3698	0.0000	2.3698	0.3588	0.0000	0.3588			0.0000			0.0000
Off-Road	2.9066	28.2579	21.4980	0.0245		1.7445	1.7445		1.6328	1.6328	0.0000	2,487.1296	2,487.1296	0.6288		2,500.3343
Total	**2.9066**	**28.2579**	**21.4980**	**0.0245**	**2.3698**	**1.7445**	**4.1144**	**0.3588**	**1.6328**	**1.9916**	**0.0000**	**2,487.1296**	**2,487.1296**	**0.6288**		**2,500.3343**

3.2 Demolition - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4156	6.6611	4.7114	0.0179	0.4234	0.1057	0.5291	0.1159	0.0973	0.2132		1,805.8587	1,805.8587	0.0128		1,806.1282
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0679	0.8450	1.8400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		154.6296	154.6296	7.9300e-003		154.7962
Total	**0.4700**	**6.7290**	**5.5564**	**0.0198**	**0.5687**	**0.1070**	**0.6757**	**0.1545**	**0.0984**	**0.2529**		**1,960.4883**	**1,960.4883**	**0.0208**		**1,960.9244**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4814	0.0000	5.4814	2.9194	0.0000	2.9194			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866		1,781.0872	1,781.0872	0.5372		1,792.3693
Total	**2.4428**	**25.7718**	**16.5144**	**0.0171**	**5.4814**	**1.3985**	**6.8799**	**2.9194**	**1.2866**	**4.2059**		**1,781.0872**	**1,781.0872**	**0.5372**		**1,792.3693**

3.3 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0418	0.5200	1.1300e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		95.1567	95.1567	4.8800e-003		95.2592
Total	**0.0334**	**0.0418**	**0.5200**	**1.1300e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**95.1567**	**95.1567**	**4.8800e-003**		**95.2592**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4666	0.0000	2.4666	1.3137	0.0000	1.3137			0.0000			0.0000
Off-Road	2.4428	25.7718	16.5144	0.0171		1.3985	1.3985		1.2866	1.2866	0.0000	1,781.0872	1,781.0872	0.5372		1,792.3693
Total	**2.4428**	**25.7718**	**16.5144**	**0.0171**	**2.4666**	**1.3985**	**3.8651**	**1.3137**	**1.2866**	**2.6003**	**0.0000**	**1,781.0872**	**1,781.0872**	**0.5372**		**1,792.3693**

3.3 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0418	0.5200	1.1300e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		95.1567	95.1567	4.8800e-003		95.2592
Total	**0.0334**	**0.0418**	**0.5200**	**1.1300e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**95.1567**	**95.1567**	**4.8800e-003**		**95.2592**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.8347	0.0000	4.8347	2.5170	0.0000	2.5170			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494		1,462.8468	1,462.8468	0.4413		1,472.1130
Total	**1.9908**	**21.0361**	**13.6704**	**0.0141**	**4.8347**	**1.1407**	**5.9754**	**2.5170**	**1.0494**	**3.5665**		**1,462.8468**	**1,462.8468**	**0.4413**		**1,472.1130**

3.4 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0418	0.5200	1.1300e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		95.1567	95.1567	4.8800e-003		95.2592
Total	**0.0334**	**0.0418**	**0.5200**	**1.1300e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**95.1567**	**95.1567**	**4.8800e-003**		**95.2592**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1756	0.0000	2.1756	1.1327	0.0000	1.1327			0.0000			0.0000
Off-Road	1.9908	21.0361	13.6704	0.0141		1.1407	1.1407		1.0494	1.0494	0.0000	1,462.8468	1,462.8468	0.4413		1,472.1130
Total	**1.9908**	**21.0361**	**13.6704**	**0.0141**	**2.1756**	**1.1407**	**3.3163**	**1.1327**	**1.0494**	**2.1821**	**0.0000**	**1,462.8468**	**1,462.8468**	**0.4413**		**1,472.1130**

3.4 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0334	0.0418	0.5200	1.1300e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		95.1567	95.1567	4.8800e-003		95.2592
Total	**0.0334**	**0.0418**	**0.5200**	**1.1300e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**95.1567**	**95.1567**	**4.8800e-003**		**95.2592**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0833	0.8637	0.9959	2.1700e-003	0.0625	0.0142	0.0767	0.0178	0.0131	0.0309		218.0289	218.0289	1.5600e-003		218.0616
Worker	0.1086	0.1358	1.6901	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2592	309.2592	0.0159		309.5924
Total	**0.1919**	**0.9995**	**2.6860**	**5.8500e-003**	**0.3531**	**0.0167**	**0.3698**	**0.0949**	**0.0153**	**0.1102**		**527.2881**	**527.2881**	**0.0174**		**527.6540**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**	**0.0000**	**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0833	0.8637	0.9959	2.1700e-003	0.0625	0.0142	0.0767	0.0178	0.0131	0.0309		218.0289	218.0289	1.5600e-003		218.0616
Worker	0.1086	0.1358	1.6901	3.6800e-003	0.2906	2.4300e-003	0.2931	0.0771	2.2300e-003	0.0793		309.2592	309.2592	0.0159		309.5924
Total	**0.1919**	**0.9995**	**2.6860**	**5.8500e-003**	**0.3531**	**0.0167**	**0.3698**	**0.0949**	**0.0153**	**0.1102**		**527.2881**	**527.2881**	**0.0174**		**527.6540**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438		1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.1100					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3972**	**13.2076**	**9.0880**	**0.0133**		**0.8075**	**0.8075**		**0.7438**	**0.7438**		**1,368.4366**	**1,368.4366**	**0.4053**		**1,376.9473**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0679	0.8450	1.8400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		154.6296	154.6296	7.9300e-003		154.7962
Total	**0.0543**	**0.0679**	**0.8450**	**1.8400e-003**	**0.1453**	**1.2100e-003**	**0.1465**	**0.0385**	**1.1200e-003**	**0.0397**		**154.6296**	**154.6296**	**7.9300e-003**		**154.7962**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2872	13.2076	9.0880	0.0133		0.8075	0.8075		0.7438	0.7438	0.0000	1,368.4366	1,368.4366	0.4053		1,376.9473
Paving	0.1100					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3972**	**13.2076**	**9.0880**	**0.0133**		**0.8075**	**0.8075**		**0.7438**	**0.7438**	**0.0000**	**1,368.4366**	**1,368.4366**	**0.4053**		**1,376.9473**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0543	0.0679	0.8450	1.8400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		154.6296	154.6296	7.9300e-003		154.7962
Total	**0.0543**	**0.0679**	**0.8450**	**1.8400e-003**	**0.1453**	**1.2100e-003**	**0.1465**	**0.0385**	**1.1200e-003**	**0.0397**		**154.6296**	**154.6296**	**7.9300e-003**		**154.7962**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5802	1.8787	7.5958	0.0187	1.2592	0.0279	1.2870	0.3364	0.0256	0.3620		1,642.5041	1,642.5041	0.0640		1,643.8485
Unmitigated	0.5802	1.8787	7.5958	0.0187	1.2592	0.0279	1.2870	0.3364	0.0256	0.3620		1,642.5041	1,642.5041	0.0640		1,643.8485

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	138.57	138.57	138.57	593,850	593,850
Total	138.57	138.57	138.57	593,850	593,850

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877
NaturalGas Unmitigated	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	133.384	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877
Total		**1.4400e-003**	**0.0131**	**0.0110**	**8.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**		**15.6922**	**15.6922**	**3.0000e-004**	**2.9000e-004**	**15.7877**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.133384	1.4400e-003	0.0131	0.0110	8.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004		15.6922	15.6922	3.0000e-004	2.9000e-004	15.7877
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.4400e-003**	**0.0131**	**0.0110**	**8.0000e-005**		**9.9000e-004**	**9.9000e-004**		**9.9000e-004**	**9.9000e-004**		**15.6922**	**15.6922**	**3.0000e-004**	**2.9000e-004**	**15.7877**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6350	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145
Unmitigated	1.6350	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.4000e-004	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145
Total	**1.6350**	**6.0000e-005**	**6.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0137**	**0.0137**	**4.0000e-005**		**0.0145**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.4000e-004	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0137	0.0137	4.0000e-005		0.0145
Total	**1.6350**	**6.0000e-005**	**6.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0137**	**0.0137**	**4.0000e-005**		**0.0145**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Rule 415 Installation of APCDs

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Peak day for all activity

Off-road Equipment - Added necessary equipment

Trips and VMT - Added the appropriate # of worker trips (8 workers, 16 one-way trips per day). 2 APCDs being delivered, so 4 one-way trips per day.

Area Coating - No painting necessary.

Consumer Products - No consumer products

Landscape Equipment - No landscaping

Water And Wastewater - No water necessary

Solid Waste - No solid waste

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	1500	0
tblConstructionPhase	NumDays	100.00	1.00
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.2033	20.8984	16.3708	0.0265	0.2038	1.4073	1.6112	0.0546	1.3716	1.4262	0.0000	2,469.7498	2,469.7498	0.3854	0.0000	2,477.8431
Total	**3.2033**	**20.8984**	**16.3708**	**0.0265**	**0.2038**	**1.4073**	**1.6112**	**0.0546**	**1.3716**	**1.4262**	**0.0000**	**2,469.7498**	**2,469.7498**	**0.3854**	**0.0000**	**2,477.8431**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.2033	20.8984	16.3708	0.0265	0.2038	1.4073	1.6112	0.0546	1.3716	1.4262	0.0000	2,469.7498	2,469.7498	0.3854	0.0000	2,477.8431
Total	**3.2033**	**20.8984**	**16.3708**	**0.0265**	**0.2038**	**1.4073**	**1.6112**	**0.0546**	**1.3716**	**1.4262**	**0.0000**	**2,469.7498**	**2,469.7498**	**0.3854**	**0.0000**	**2,477.8431**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	6.3700e-003	0.0209	0.0845	2.1000e-004	0.0141	3.1000e-004	0.0144	3.7600e-003	2.9000e-004	4.0500e-003		18.3605	18.3605	7.1000e-004		18.3755
Total	**0.0283**	**0.0260**	**0.0888**	**2.4000e-004**	**0.0141**	**6.9000e-004**	**0.0148**	**3.7600e-003**	**6.7000e-004**	**4.4300e-003**		**24.4236**	**24.4236**	**8.3000e-004**	**1.1000e-004**	**24.4755**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Mobile	6.3700e-003	0.0209	0.0845	2.1000e-004	0.0141	3.1000e-004	0.0144	3.7600e-003	2.9000e-004	4.0500e-003		18.3605	18.3605	7.1000e-004		18.3755
Total	**0.0283**	**0.0260**	**0.0888**	**2.4000e-004**	**0.0141**	**6.9000e-004**	**0.0148**	**3.7600e-003**	**6.7000e-004**	**4.4300e-003**		**24.4236**	**24.4236**	**8.3000e-004**	**1.1000e-004**	**24.4755**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/20/2016	1/20/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Welders	2	8.00	46	0.45
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1032	20.4693	14.9324	0.0234		1.4001	1.4001		1.3650	1.3650		2,192.2249	2,192.2249	0.3750		2,200.1001
Total	**3.1032**	**20.4693**	**14.9324**	**0.0234**		**1.4001**	**1.4001**		**1.3650**	**1.3650**		**2,192.2249**	**2,192.2249**	**0.3750**		**2,200.1001**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0333	0.3455	0.3984	8.7000e-004	0.0250	5.6900e-003	0.0307	7.1200e-003	5.2300e-003	0.0124		87.2116	87.2116	6.2000e-004		87.2246
Worker	0.0668	0.0836	1.0400	2.2700e-003	0.1788	1.4900e-003	0.1803	0.0474	1.3700e-003	0.0488		190.3133	190.3133	9.7600e-003		190.5184
Total	**0.1001**	**0.4290**	**1.4384**	**3.1400e-003**	**0.2038**	**7.1800e-003**	**0.2110**	**0.0546**	**6.6000e-003**	**0.0612**		**277.5249**	**277.5249**	**0.0104**		**277.7430**

3.2 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1032	20.4693	14.9324	0.0234		1.4001	1.4001		1.3650	1.3650	0.0000	2,192.2249	2,192.2249	0.3750		2,200.1001
Total	**3.1032**	**20.4693**	**14.9324**	**0.0234**		**1.4001**	**1.4001**		**1.3650**	**1.3650**	**0.0000**	**2,192.2249**	**2,192.2249**	**0.3750**		**2,200.1001**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0333	0.3455	0.3984	8.7000e-004	0.0250	5.6900e-003	0.0307	7.1200e-003	5.2300e-003	0.0124		87.2116	87.2116	6.2000e-004		87.2246
Worker	0.0668	0.0836	1.0400	2.2700e-003	0.1788	1.4900e-003	0.1803	0.0474	1.3700e-003	0.0488		190.3133	190.3133	9.7600e-003		190.5184
Total	**0.1001**	**0.4290**	**1.4384**	**3.1400e-003**	**0.2038**	**7.1800e-003**	**0.2110**	**0.0546**	**6.6000e-003**	**0.0612**		**277.5249**	**277.5249**	**0.0104**		**277.7430**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.3700e-003	0.0209	0.0845	2.1000e-004	0.0141	3.1000e-004	0.0144	3.7600e-003	2.9000e-004	4.0500e-003		18.3605	18.3605	7.1000e-004		18.3755
Unmitigated	6.3700e-003	0.0209	0.0845	2.1000e-004	0.0141	3.1000e-004	0.0144	3.7600e-003	2.9000e-004	4.0500e-003		18.3605	18.3605	7.1000e-004		18.3755

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	1.50	1.50	1.50	6,642	6,642
Total	1.50	1.50	1.50	6,642	6,642

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513363	0.060352	0.180146	0.139338	0.042155	0.006672	0.015739	0.030749	0.001928	0.002503	0.004351	0.000593	0.002111

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
NaturalGas Unmitigated	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	51.5342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	0.0515342	5.6000e-004	5.0500e-003	4.2400e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004		6.0629	6.0629	1.2000e-004	1.1000e-004	6.0998
Total		**5.6000e-004**	**5.0500e-003**	**4.2400e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**		**6.0629**	**6.0629**	**1.2000e-004**	**1.1000e-004**	**6.0998**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	1.5900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0214**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation