# BOARD MEETING DATE: September 1, 2017 AGENDA NO. 13

- REPORT: Report to Legislature and CARB on SCAQMD's Regulatory Activities for Calendar Year 2016
- SYNOPSIS: The SCAQMD is required by law to submit a report to the Legislature and CARB on its regulatory activities for the preceding calendar year. The report is to include a summary of each rule and rule amendment adopted by SCAQMD, number of permits issued, denied, or cancelled, emission offset transactions, budget and forecast, and an update on the Clean Fuels program. Also included is the Annual RECLAIM Audit Report, as required by RECLAIM Rule 2015 - Backstop Provisions.

COMMITTEE: No Committee Review

# **RECOMMENDED ACTION:**

Receive and file the attached report, and direct staff to forward the final report to the Legislature and the California Air Resources Board.

Wayne Nastri Executive Officer

DA: FW:HC:jf

# Background

SCAQMD is subject to several internal and external reviews of its air quality programs. These include an annual review of SCAQMD's proposed operating budget for the upcoming fiscal year and compliance program audits.

In 1990, the Legislature directed SCAQMD to provide an annual review of its regulatory activities (SB 1928, Presley), and specified the type of information required (Health and Safety Code §40452). Many of the required elements overlap with other requirements of separate legislation. For example, information on SCAQMD's Clean Fuels Program is a requirement of this report, but is also a separate requirement under

legislation passed in 1999 (SB 98, Alarcón). The purpose of this report is to fill in pieces of additional data needed to compile a comprehensive regulatory overview. Most of the information included in this report is not new, but is simply a compilation of information previously seen by the Board. For example, Chapter I lists all the rules and rule amendments adopted by the Board during 2016. The Annual RECLAIM Audit Report, which the Board approved on March 3, 2017, also required to be submitted to the Legislature by RECLAIM Rule 2015 - Backstop Provisions.

The specific requirements of this report include:

- A summary of each major rule and rule amendment adopted by the Board;
- The number of permits to operate or permits to construct that were issued, denied, cancelled or not renewed;
- Data on emission offset transactions and applications during the previous year;
- The budget and forecast of staff increases or decreases for the following fiscal year;
- An identification of the source of all revenues used to finance the SCAQMD's activities;
- An update on the SCAQMD's Clean Fuels program; and
- The annual RECLAIM Audit Report.

# Attachment

Report to the Legislature on the Regulatory Activities of the SCAQMD for Calendar Year 2016 (including Executive Summary)<sup>1</sup>

<sup>1</sup> Due to the bulk of these materials, Chapters III, IV and V of the report are available on CD, online at <u>http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-september-2017.pdf</u>, or anyone wishing to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

# REPORT TO THE LEGISLATURE ON THE REGULATORY ACTIVITIES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Pursuant to Chapter 1702, Statutes of 1990 (SB 1928)





Cleaning the Air that We Breathe...

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

Chairman:

Vice Chairman:

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

BEN BENOIT Mayor Pro Tem, City of Wildomar Cities Representative, Riverside County

Members:

Marion Ashley Supervisor, County of Riverside

Joe Buscaino Councilmember, City of Los Angeles City of Los Angeles Representative

Michael Cacciotti Mayor, City of South Pasadena County of Los Angeles Cities Representative, Eastern Region

Sheila Kuehl Supervisor, County of Los Angeles

Joseph K. Lyou, PH.D. Governor's Appointee

Larry McCallon Mayor Pro Tem, City of Highland Cities Representative, San Bernardino County Judith Mitchell Councilmember, City of Rolling Hills Estate County of Los Angeles Cities Representative, Western Region

Shawn Nelson Supervisor, County of Orange

Dr. Clark E. Parker Sr. Senate Rules Committee Appointee

Dwight Robinson Councilmember, City of Lake Forest Cities Representative, Orange County

Janice Rutherford Supervisor, County of San Bernardino

Wayne Nastri Executive Officer

# **TABLE OF CONTENTS**

# **EXECUTIVE SUMMARY**

# **CHAPTER I**

# RULE DEVELOPMENT, CEQA, AND SOCIOECONOMIC IMPACT ANALYSES

•	Rule Adoptions and Amendments in 2016	
	and CEQA Alternatives	11
•	CEQA Lead Agency Projects	18
•	Socioeconomic Impact Analyses	18

• Socioeconomic Impact Analyses

# **CHAPTER II ENGINEERING AND PERMITTING** ACTIVITIES

•	Engineering and Permitting	27
•	Emissions Reduction Credit (ERC) and	
	Short Term Emission Reduction Credit (STERC)	
	Transactions for Fiscal Year 2015-16	
	(California Health and Safety Code Section 40452)	78

# **CHAPTER III**

# **BUDGET AND WORK PROGRAM FISCAL YEAR 2017-2018** (Attachment)

# **CHAPTER IV CLEAN FUELS PROGRAM 2016 ANNUAL REPORT AND 2017 PLAN UPDATE**

(Attachment)

# **CHAPTER V ANNUAL RECLAIM AUDIT REPORT FOR 2015 COMPLIANCE YEAR** (Attachment)

4

PAGE

# **EXECUTIVE SUMMARY**

# Introduction

The South Coast Air Quality Management District (SCAQMD) is subject to internal and external reviews of its air quality programs. These include annual reviews of the District's budget, forecast and proposed operating budget for the upcoming fiscal year, and compliance program audits. In addition, the SCAQMD is required to submit to the California Air Resources Board (CARB) and State Legislature an annual review of its regulatory activities for the preceding calendar year. The attached report satisfies this latter requirement which is mandated pursuant to Chapter 1702, Statutes of 1990 (SB 1928, Presley), Section 40452 of the California Health and Safety Code.

# Rule Adoptions and Amendments in 2016 and CEQA Alternatives

This section contains a summary of each major rule adoption or amendment adopted by the SCAQMD Governing Board in the preceding calendar year (e.g., 2016). Each summary contains detailed information about the estimated emission reductions, cost effectiveness, alternatives considered pursuant to the requirements in the California Environmental Quality Act (CEQA), socioeconomic impacts, and sources of funding.

Projects undertaken by public agencies are subject to CEQA, so rules and regulations promulgated by SCAQMD must be reviewed to determine if they are considered to be a "project" as defined by CEQA. If they are not a "project" or they are determined to be exempt from CEQA, no further action is required. If the project has the potential to create significant or less than significant adverse effects on the environment, then an environmental analysis is necessary. New rules or existing rules being amended often require a comprehensive CEQA document that contains an environmental impact analysis which includes the following:

- \* identification of potentially significant adverse environmental impacts evaluated based on environmental checklist topics;
- \* identification of feasible measures, if any, to mitigate significant adverse environmental impacts to the greatest extent feasible;
- \* if necessary, a discussion and comparison of the relative merits of feasible project alternatives that generally achieve the goals of the project, but may generate fewer or less severe adverse environmental impacts; and,
- \* identification of environmental topics not significantly adversely affected by the project.

If it is concluded in the CEQA document that no significant adverse environmental impacts would be generated by the proposed project, neither the identification of feasible mitigation measures nor an analysis of CEQA alternatives to the project is required. If significant adverse environmental impacts are identified, feasible mitigation measures, if any, and alternatives must be identified and an analysis of the relative merits of each alternative is required. SCAQMD operates under a regulatory program certified by the Secretary for Resources pursuant to Public Resources Code (PRC) Section 21080.5. Certification means that the SCAQMD can incorporate its environmental analyses into CEQA documents other than environmental impact reports (EIRs), negative declarations (NDs), or mitigated NDs (MNDs). In addition, certified CEQA programs are not subject to a limited number of specific CEQA requirements identified in PRC Section 21080.5. All documents prepared by SCAQMD under its certified regulatory program are called Environmental Assessments (EAs). SCAQMD rules and regulations are subject to SCAQMD's certified CEQA program, while plans (e.g., AQMP) are not. In addition, Supplemental EAs, Addenda, and EAs for projects determined not to have significant environmental impacts often contain a more focused analysis of potential environmental impacts.

Refer to Chapter 1 for rule adoptions, rule amendments and CEQA Alternatives details.

# **CEQA Lead Agency Projects**

SCAQMD also acts as the Lead Agency under CEQA for non-SCAQMD projects where SCAQMD typically has primary approval, i.e., discretionary permitting authority. Under CEQA, the Lead Agency is responsible for determining whether an EIR, ND, or other type of CEQA document is necessary for any proposal considered to be a "project" as defined by CEQA. Further, the Lead Agency is responsible for preparing the environmental analysis, complying with all procedural requirements of CEQA, and approving the environmental documents. All documents prepared by SCAQMD for permit projects are subject to the standard CEQA requirements. SCAQMD staff is responsible for preparing or reviewing prepared CEQA documents for stationary source permit projects.

Refer to Chapter 1 for CEQA Lead Agency details.

# Socioeconomic Impact Analyses

California Health and Safety Code Section 40440.8 requires that SCAQMD perform socioeconomic impact assessments for its rules and regulations that will significantly affect air quality or emissions limitations. Prior to the requirements of Section 40440.8, SCAQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 resolution of its Governing Board. Additionally, SCAQMD staff assesses socioeconomic impacts of CEQA alternatives to those rules with significant cost and emission reduction impacts.

The elements of socioeconomic impact assessments include direct effects on various types of affected industries in terms of control costs and cost effectiveness as well as public health benefits associated with Air Quality Management Plans (AQMPs). Additionally, SCAQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of SCAQMD rules on Los Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to employment and competitiveness.

Refer to Chapter 1 for Socioeconomic Impact Analyses.

# **Engineering and Permitting**

# Background

Section 40452 of the California Health and Safety Code requires that the SCAQMD submit an annual report to both the state board and Legislature that summarizes its regulatory activities for the preceding calendar year. Paragraph (b) of Section 40452 requires that the annual report include data on "the number of permits to operate or to construct, by type of industry, that are issued and denied, and the number of permits to operate that are not renewed." Paragraph (c) of section 40452 requires that the annual report also includes data on emission offset transactions and applications during the previous fiscal year, including an accounting of the number of applications for permits for new or modified sources that were denied because of the unavailability of emission offsets. In addition, SCAQMD Rule 2015 -Backstop Provisions, requires submittal of the annual Regional Clean Air Incentives Market (RECLAIM) Audit Report for the 2015 Compliance Year to the Legislature.

The following paragraphs provide a brief summary for each report.

# Permitting Data – Calendar Year 2016

During calendar year 2016, SCAQMD dispositioned a total of 9,872 applications. The majority of these applications were for Permits to Operate (3,725), Area Sources & Certified/Registrations (2,327), and Changes of Operators (1,511). Also, 1,200 permits were not renewed. The total number of dispositioned applications for 2016 is about 13% higher than the total for 2015, mainly attributed to the SCAQMD's Permit Application Backlog Reduction efforts. This data, broken down into nine different categories, is summarized in Table 1 (Chapter II – Engineering and Permitting Activities).

Table 2 contains a breakdown of permits dispositioned (in the nine categories) and permits not renewed, by type of industry. The type of industry was based on North American Industry Classification System (NAICS) codes, which were provided by the applicant at the time of application filing. The top four NAICS codes were 324110 – Petroleum Refineries, 447190 - Gasoline Service Stations, 811121 – Automotive Body, Paint, and Interior Repair and Maintenance, and 445110 – Supermarkets and Other Grocery (except for Convenience) Stores.

#### Emission Offset Transactions Data – Fiscal Year 2015/2016

During fiscal year 2015-16, a total of 115 emission offset transactions were completed, which include 70 transactions for reactive organic gases (ROG), 2 transactions for oxides of nitrogen (NOx), 2 transactions for oxides of sulfur (SOx), 1 transaction for carbon monoxide (CO), and 40 transactions for particulate matter with an aerodynamic diameter less than 10 microns (PM10). The amount of emissions offsets transferred, by pollutant, include 1,486 pounds per day of ROG, 106 pounds per day of NOx, 46 pounds per day of SOx, 32 pounds per day of CO, and 137 pounds per day of PM10 (see Table 3). No banking applications resulting in the issuance of new emission offsets for ROG, NOx, SOx, CO or PM10 were processed. Additionally, no applications were denied permits for new or modified sources

due to the unavailability of emission offsets. (See Chapter II – Engineering and Permitting Activities, Attachment A for details).

### **RECLAIM Audit Report**

The REgional CLean Air Incentives Market (RECLAIM) program was adopted in 1993 to provide facilities with flexibility in achieving the same emissions reduction goals as would have been achieved under the traditional command and control approach while lowering the cost of compliance. To ensure RECLAIM is achieving its goal, SCAQMD Rule 2015 - Backstop Provisions, requires preparation of an annual audit report on the program. This Annual RECLAIM Audit Report assesses emission reductions, availability of RECLAIM Trading Credits (RTCs) and their average annual prices, job impacts, compliance issues, and other measures of performance for the twenty-second year of this program. The results of the annual audit show that RECLAIM continues to meet its aggregate emission goals and all other specified objectives.

As discussed in more detail in the audit report (see Attachment B), a total of 268 facilities were in the RECLAIM program at the end of Compliance Year 2015. Total NOx emissions from RECLAIM facilities were 25% less than the aggregate NOx allocations, and SOx emissions were 26% less than the aggregate SOx allocations for the program. The vast majority of RECLAIM facilities complied with their allocations during the 2015 compliance year (94% of NOx facilities and 97% of SOx facilities).

A total of over \$1.47 billion in RTCs has been traded since the adoption of RECLAIM, of which \$118.6 million occurred in calendar year 2016 (compared to \$197.1 million in calendar year 2015), excluding swaps. The annual average prices of discrete-year NOx and SOx RTCs and infinite-year block (IYB – trades that involve blocks of RTCs with a specified start year and continuing in perpetuity) NOx and SOx RTCs traded in calendar years 2015 and 2016 were all below the applicable review thresholds for initiating program review.

In Compliance Year 2015, RECLAIM facilities reported a net gain of 1,329 jobs, representing 1.21% of their total employment. The RECLAIM program also met other applicable requirements including meeting the applicable federal offset ratio under New Source Review and having no significant seasonal fluctuation in emissions. Additionally, there is no evidence that RECLAIM resulted in any increase in health impacts due to emissions of air toxics.

Refer to Chapter V for the 2015 Annual RECLAIM Audit Report.

# **Budget and Work Program**

The Executive Officer's Budget, Goals and Priority Objectives for FY 2017-18 was adopted by the Governing Board on June 2, 2017 and included the following fee increases for FY 2017-18: 1) Pursuant to Rule 320, an increase of most fees by 2.5% consistent with the Consumer Price Index; 2) A fee increase of 10.67% for Title V sources; and a 4% increase in specified fees for non-Title V sources. Refer to Chapter III for the Budget & Work Program Fiscal Year 2017-2018 Report.

# **Clean Fuels Program**

#### 2016 Annual Report

During CY 2016 the SCAQMD executed 60 new contracts, projects or studies and modified 6 continuing projects adding additional dollars toward research, development, demonstration and deployment (RDD&D) of alternative fuel and clean fuel technologies. The SCAQMD Clean Fuels Program contributed nearly \$21.8 million in partnership with other governmental organizations, private industry, academia and research institutes, and interested parties, with total project costs of a bit more than \$198 million. The significant project scopes of a few key contracts executed in 2016 resulted in leveraging \$9 for every \$1 of Clean Fuels funding, whereas typical leveraging is \$3-\$4 for every \$1 in Clean Fuels funding. Leveraging dollars and aggressively applying for additional funds whenever funding opportunities arise is more important than ever given the magnitude of additional funding identified in the Draft 2016 AQMP to achieve federal ozone air quality standards.

The projects or studies executed in 2016 addressed a wide range of issues and opportunities with a diverse mix of advanced technologies. The following core areas of technology advancement for 2016 executed contracts (in order of funding percentage) include:

- Electric and Hybrid Vehicle Technologies and Related Infrastructure (emphasizing electric and hybrid electric trucks and container transport technologies with zero emission operations);
- Fueling Infrastructure and Deployment (predominantly natural gas and renewable fuels);
- Hydrogen and Mobile Fuel Cell Technologies and Infrastructure;
- Engine Systems (emphasizing alternative and renewable fuels for truck and rail applications);
- Technology Transfer/Assessment and Outreach; and
- Fuels and Emission Studies.

During CY 2016, the SCAQMD supported a variety of projects and technologies, ranging from near- term to long-term research, development, demonstration and deployment activities. This "technology portfolio" strategy provides the SCAQMD the ability and flexibility to leverage state and federal funding while also addressing the specific needs of the South Coast Air Basin (Basin). Projects executed in CY 2016 included but are not limited to continued development and demonstration of electric and hybrid technologies with an emphasis on zero emission goods movement technologies, large-scale production of renewable natural gas (RNG) as well as demonstration of next generation engines using RNG, development and demonstration of hydrogen technologies and infrastructure, and development and demonstration of hydrogen technologies and infrastructure, and development and demonstration of hydrogen technologies and ultra-low emission diesel engines and vehicles.

As of January 1, 2017, there were 93 open contracts (Appendix B) in the Clean Fuels Program.

Thirty-two (32) RDD&D projects or studies and 11 technology assessment and transfer contracts were completed in 2016.

2017 Technology Advancement Plan Update

The overall strategy is based in large part on technology priorities and opportunities identified in the SCAQMD's AQMP and the SCAQMD Governing Board's directives to protect the health of residents in the Basin. The NOx, VOC and PM emission sources of greatest concern are heavy-duty on-road vehicles, medium- and light-duty on-road vehicles, and off-road equipment. Ocean-going vessels and locomotives remain a concern for the region, but at this time only the federal government (or CARB with EPA approval) has the authority to set emissions standards for them. Notwithstanding, TAO works with maritime and railroad companies to push the envelope in these areas as well.

The Plan Update includes projects to develop, demonstrate and commercialize a variety of technologies, from near-term to long-term commercialization, that are intended to provide solutions to the emission control needs identified in the 2016 AQMP. Given the need for significant reductions over the next 6-14 year timeframe, mid- and longer-term alternative fuels, hybrid, electric and fuel cell based technologies are emphasized. Areas of focus include:

- reducing emissions from port-related activities, such as cargo handling equipment and container movement technologies, including demonstration and deployment of cargo container movement systems with zero emission range;
- mitigating criteria pollutant increases from renewable fuels, such as renewable natural gas, diesel and hydrogen as well as other renewable fuels and waste streams;
- developing and demonstrating electric-drive (fuel cell, battery, plug-in hybrid and hybrid) technologies across light-, medium- and heavy-duty platforms;
- producing transportation fuels and energy from renewable and waste stream sources; and
- establishing large-scale hydrogen refueling and EV charging infrastructure to help accelerate the introduction of zero emission vehicles into the market.

Potential projects for 2017 total \$16.5 million, with anticipated leveraging of more than \$4 for every \$1 of Clean Fuels funding, for total project costs of nearly \$70 million. The proposed projects may also be funded by revenue sources other than the Clean Fuels Program, especially VOC and incentive projects.

# CHAPTER I RULE DEVELOPMENT, CEQA, and SOCIOECONOMIC IMPACT ANALYSES

#### RULE ADOPTIONS AND AMENDMENTS IN 2016 AND CEQA ALTERNATIVES

The following section lists all new and amended rules adopted by the Governing Board in 2016 by month. The type of CEQA document (including projects exempt from CEQA) is described for each new rule or rule amendment project. Alternatives are summarized only for those projects requiring an alternatives analysis pursuant to CEQA.

#### **JANUARY 8, 2016**

No rules were adopted or amended in January.

#### **FEBRUARY 5, 2016**

Two rules were amended in February, as follows:

1. Amended Rule 1113 – Architectural Coatings: Rule 1113 was amended to restrict the small container exemption for some categories, eliminate the small container exemption for categories that do not use the exemption and for high VOC specialty categories, lower some VOC limits, carve out new categories and establish VOC limits, revise definitions, clarify rule language, and remove outdated rule language. A Final EA was prepared for the project and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA. The SCAQMD Governing Board certified the Final EA and approved the project with the following modifications: the final compliance date was changed to January 1, 2020, and staff was directed to provide a report to the Board in January 2019 on the status of the development of waterbased coatings.

*Estimated Emission Reductions*: VOC (0.88 tons/day). *Cost Effectiveness*: \$1,150 per ton of VOC reduced from lowering the VOC limits and restricting and/or eliminating the Small Container Exemption for certain categories. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: See Socioeconomic Impact Analysis section. *Source of Funding*: Rule 314 Fees.

2. Affirmation of Amendment to Regulation XX to Allow Use of Certified Emission Levels for Certain Rule 219 Exempt Equipment and Amend Definition of "Standard Gas Conditions" to Conform to Existing Practice: The purpose of this project was to affirm the December 4, 2015 adoption of a specific amendment to the Proposed Amended Regulation XX - Regional Clean Air Incentives Market (RECLAIM). The specific amendment pertained to Rule 2012 provisions to allow the use of certified emissions values for Rule 219 equipment emission reporting and these provisions were presented and adopted as part of the December 4, 2015 Board package, even though the staff report had stated in error that this amendment would not be included. Also, Rule 2011 and 2012 protocol provisions clarifying the calculation of missing data consistent with current practice and other minor clarifications were presented and adopted as part of the December 4, 2015 Board package. While these amendments were legally adopted at that time, staff believed the public should be given a clear opportunity to comment on these amendments. Therefore, staff proposed that the Board affirm these amendments. In addition, SCAQMD staff proposed to amend Rules 2011 and 2012 to clarify a

definition for "Standard Gas Conditions" to conform to existing practice. This amended definition was inadvertently not included in the December 4, 2015 Board package although it was included in the October, 2015 Set Hearing package. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Emission Fees and Annual Operating Fees.

### MARCH 4, 2016

No rules were adopted or amended in March.

#### **APRIL 1, 2016**

No rules were adopted or amended in April.

#### MAY 6, 2016

One rule was amended in May, as follows:

Amended Rule 306 – Plan Fees: Rule 306 was amended to make administrative changes to extend the payment due date for the remittance of initial plan fees and plan annual renewal fees from 30 to 60 days to be consistent with other fees in Regulation III – Fees. In addition, the amendments to Rule 306 updated the list of plans in subdivision (h) of Rule 306 that would be subject to annual review/annual renewal fees. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Permit Fees and Annual Operating Fees.

#### JUNE 3, 2016

One rule was amended in June, as follows:

1. Amended Rule 1110.2 — Emissions from Gaseous- and Liquid-Fueled Engines: The Board adopted amendments at the December 4, 2015 meeting to provide the regulated community with additional time to comply with the biogas engine limits. Staff was directed to return to the Board with an amendment that would provide relief for one affected facility as expeditiously as possible with the proper CEQA analysis. This single facility operates two landfill gas-fired engines at the Prima Deshecha Landfill, is subject to a power purchase agreement (PPA) that expires on October 1, 2022, and cannot economically meet the established compliance deadline of January 1, 2017. The amendments exempted the facility operator from the emission requirements of the rule, contingent upon the facility submitting a retirement plan for the permanent shutdown of

all equipment subject to this rule at the expiration date of the PPA. A Final Subsequent EA was prepared for the project and the analysis concluded that the project would create significant adverse air quality impacts. No feasible mitigation measures were identified that would reduce or eliminate the impacts to less than significant, so a mitigation monitoring plan was not adopted for the project. Since significant adverse environmental impacts were identified, an alternatives analysis was required by CEQA and prepared that included the following alternatives:

**Alternative A - No Project:** The proposed project (e.g., amending Rule 1110.2) would not be adopted and the current universe of equipment at biogas facilities will continue to be subject to the NOx, VOC and CO emission limits according to the current compliance schedule in Rule 1110.2. If the facility cannot comply with the existing rule, operators may shut down their biogas engines and release their gas through their existing flares. The facility would purchase more electricity.

Alternative B - Replace Flares: Through additional rulemaking, biogas facilities not meeting the current Rule 1110.2 biogas emission limits would be required to process the biogas through new cleaner and efficient flares under a separate rule. The new flares' emissions would be lower than the NOx, CO, and VOC emissions from the proposed project. GHG emissions would increase from power plants needed to generate electricity that would otherwise be generated from the biogas engines and backup diesel engines. All other requirements and conditions in the amendments to Rule 1110.2 would be applicable.

**Alternative C - New Micro Turbines:** Through additional rulemaking, biogas facilities not meeting the current Rule 1110.2 biogas emission limits would be required to process the biogas through new micro turbines to handle their facilities' biogas under a separate rule. The new microturbine emissions would be comparable to the NOx, CO, and VOC emissions from the proposed project. GHG emissions would increase from backup diesel engines. All other requirements and conditions in the amendments to Rule 1110.2 would be applicable.

The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: 0.07 tons per day (tpd) NOx; 0.01 tpd VOC, and 0.08 tpd CO (This amendment delayed a compliance date, so these values represent emission reductions foregone for a previous compliance date). *Cost Effectiveness*: Not required but analyzed per public comment request: \$4,200 to \$58,000 per ton of NOx, VOC and CO/7. *CEQA Alternatives*: Three alternatives were analyzed, alternatives described above. *Socioeconomic Impact*: None. *Source of Funding*: Emission Fees and Annual Operating Fees.

# JULY 8, 2016

No rules were adopted or amended in July.

# AUGUST 2016

There was no Governing Board meeting in August, so no rules were adopted or amended.

#### **SEPTEMBER 2, 2016**

No rules were adopted or amended in September.

#### **OCTOBER 7, 2016**

Three projects amending five rules (e.g., one project amending three rules concurrently, and two other projects amending one rule each) were approved in October, as follows:

1. Amended Rule 307.1 - Alternative Fees for Air Toxics Emissions Inventory; Amended Rule 1401 - New Source Review of Toxic Air Contaminants; Amended Rule 1402 - Control of Toxic Air Contaminants from Existing Sources; SCAOMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402; and, SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program: Rule 307.1 was amended to: 1) include a new category of billing for facilities in the Voluntary Risk Reduction Program; 2) to reimburse the SCAQMD for costs associated with public meetings required by Rule 1402; 3) replace the Standard Industrial Classification (SIC) codes with references to the North American Industry Classification System (NAICS) codes instead; 4) replace references to the California Air Pollution Control Officers Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990" with the most current version of SCAQMD's "Facility Prioritization Procedures For AB 2588 Program;" and, 5) improve clarity. The amendments to Rule 307.1 were determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the amendments to Rule 307.1 were determined to be exempt from CEQA, no alternatives analysis was required.

Rules 1401 and 1402 were amended to remove provisions that require staff to report to the Governing Board regarding changes from OEHHA regarding new or revised toxic air contaminant health values but instead discuss these changes and the potential impacts to permitting and AB 2588 in the AB 2588 Annual Report. Rule 1402 was amended to include a voluntary program to allow facilities to implement early risk reduction measures that go beyond the Action Risk threshold in Rule 1402 with an alternative public notification approach. In addition, Rule 1402 was amended to streamline implementation, improve clarity, and include provisions for potentially high risk level facilities. The "Public Notification Procedures for Phase I and II Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" was revised and "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" has been developed. A Final EA was prepared and the analysis concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required by CEQA. The SCAQMD Governing Board certified the Final EA and approved the project with the following modification: a provision was added to PAR 1402 for High Risk Level Facilities which would require them to implement their Risk Reduction Plans no later than two years from the date of their approved plans instead of 2.5 years.

Estimated Emission Reductions: None. Cost Effectiveness: Not applicable. CEQA Alternatives: None, not required. Socioeconomic Impact: See Socioeconomic Impact

Analysis section. *Source of Funding*: Permit Fees, Emission Fees, and Annual Operating Fees.

2. Amended Regulation IX – Standards of Performance for New Stationary Sources: The purpose of the amendments was to incorporate by reference federal New Source Performance Standards (NSPS) into Regulation IX. The incorporation by reference of NSPS requirements into Regulation IX recognizes the SCAQMD's authority to implement and enforce these federal regulations at the local level. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Annual Operating Fees.

3. Amended Regulation XX - Regional Clean Air Incentives Market (RECLAIM): Rule 2002 - Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx), which is one rule within Regulation XX - RECLAIM, was amended to address the treatment of RECLAIM Trading Credits (RTCs) upon NOx RECLAIM facility shutdowns. The objective of these amendments was to prevent NOx RTCs associated with a shutdown facility from the largest RECLAIM facilities from entering the market and potentially delaying the installation of pollution controls at other RECLAIM facilities. Specifically, the amendments to Rule 2002 established the criteria for determining a facility shutdown and the methodology to calculate the amount of NOx RTCs by which that facility's future holdings will be reduced. The amendments also included exclusions from these provisions for facilities under the same ownership and for facilities with approved Planned Non-Operational status for up to five years. A facility may request Planned Non-Operational status if it experiences a temporary substantial drop in its NOx emissions and meets specific criteria. The shutdown provisions would apply to facilities listed in Table 7 and Table 8 of Rule 2002 that have an initial allocation and that shut down entirely. Table 7 and Table 8 facilities in the RECLAIM program are those among the top 90 percent of RTC holders that are subject to the RTC holding reductions adopted for the December 4, 2015 amendments to Regulation XX - NOx RECLAIM. As such, the amendments to Regulation XX, Rule 2002 were considered to be modifications to the previously approved project (the December 4, 2015 amendments to Regulation XX and the certified December 2015 Final Program EA). SCAQMD staff's review of the amendments showed that while the criteria have been revised from the original proposal in December 2015 relative to the handling of shutdown RTCs, the potential impacts from implementing the amendments were concluded to be the same as what was previously analyzed in the December 2015 Final Program EA. Thus, the amendments for handling shutdown RTCs were concluded to not be expected to trigger any conditions identified in CEOA Guidelines Section 15162. Therefore, an Addendum was determined to be the appropriate CEQA document and as such, an Addendum to the December 2015 Final Program EA for Proposed Amended Regulation XX - Regional Clean Air Incentives Market (RECLAIM) was prepared. The analysis in the Addendum concluded that there would be no significant adverse environmental impacts. Since no significant adverse environmental impacts were identified, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Permit Fees, Emission Fees, and Annual Operating Fees.

#### **NOVEMBER 4, 2016**

One project amending two rules was approved in November, as follows:

1. Amended Rule 1302 – Definitions; and, Amended Rule 1325 – Federal PM2.5 New Source Review Program: Rule 1302 was amended to: 1) revise the definition of the term Allocation to remove incorrect references to Emission Reduction Credits; and, 2) revise the definition of the term Major Polluting Facility to lower the SOx potential to emit thresholds for facilities located in the South Coast Air Basin and Riverside County portion of the Salton Sea Air Basin from 100 tons per year (tons/year) to 70 tons/year, for consistency with the serious non-attainment classification for PM because SOx is a precursor to PM formation. Rule 1325 was amended to: 1) revise the definition of the term Major Polluting Facility by clarifying that the Major Source threshold of 100 tons/year for PM2.5 and PM2.5 precursors will remain in effect until August 14, 2017 or until the effective date of U.S. EPA's approval of these amendments to Rule 1325, whichever is later; 2) add a new Major Source threshold of 70 tons/year for PM2.5 and PM2.5 precursors to go into effect after August 14, 2017 or upon the effective date of U.S. EPA's approval of these amendments to Rule 1325, whichever is later; 3) expand the definition of the term Precursors to include VOC and ammonia because these pollutants are precursors to PM2.5 formation, to go into effect after August 14, 2017 or upon the effective date of U.S. EPA's approval of these amendments to Rule 1325, whichever is later; 4) revise the definition of the term Significant to establish new thresholds for VOC and ammonia at 40 tons/year each; 5) revise subdivision (f) - Two Year Limit on Facility Exemption, to be consistent with the proposed revisions to the definition of Major Source threshold; and, 6) add new subdivision (j) – Offset Exemption for Regulatory Compliance, to allow an exemption from the requirement to provide offsets under limited circumstances. Other minor changes were also included to improve clarity and provide consistency throughout both rules. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project as proposed.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Permit Fees, Emission Fees, and Annual Operating Fees.

#### **DECEMBER 2, 2016**

One project amending the BACT Guidelines, was approved in December, as follows:

1. Amended Best Available Control Technology (BACT) Guidelines: SCAQMD's New Source Review (NSR) regulations require applicants to use Best Available Control Technology (BACT) for new sources, relocated sources, and for modifications to existing sources that may result in an emission increase of any nonattainment air contaminant, any ozone depleting compound (ODC), or ammonia. Regulation XIII - New Source Review also requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the BACT requirements for commonly permitted equipment. The BACT Guidelines were amended to update the Overview, Parts A, B, C and D, and to add Parts E and F in order to maintain consistency with recent changes to SCAQMD rules, and state and federal requirements. The amendments were determined to: 1) not result in more stringent requirements than those already required by current regulations; and 2) have no potential to adversely impact air quality or any other environmental topic area. The project was determined to be exempt from CEQA and a Notice of Exemption was filed with the County Clerks of Los Angeles, Orange, Riverside and San Bernardino counties. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The SCAQMD Governing Board approved the project with the following modifications: 1) staff was directed to work with industry and other stakeholders on assessing ultraviolet/electron beam (UV/EB) technology as an alternative to meeting BACT and the analysis should include BACT determinations by other air districts; and 2) staff should present the findings to the Stationary Source Committee by June 2017.

*Estimated Emission Reductions*: None. *Cost Effectiveness*: Not applicable. *CEQA Alternatives*: None, not required. *Socioeconomic Impact*: None. *Source of Funding*: Permit Fees, Emission Fees, and Annual Operating Fees.

# **CEQA LEAD AGENCY PROJECTS**

In 2016, one lead agency project with a certified CEQA document was approved by the SCAQMD's Executive Officer on June 7, 2016, as summarized below.

1. June 2016 Addendum to the April 2012 Final Subsequent Environmental Impact Report (SEIR) for the Sunshine Gas Producers Renewable Energy Project: Sunshine Gas Producers proposed to revise their Renewable Energy Project to increase the heat input rating on all five of its landfill gas turbines without requiring any physical modifications. As a result of the increase in fuel consumption by the landfill gas-fired turbines, less gas will be sent to and combusted in the Sunshine Canyon Landfill flares. The Renewable Energy Project was originally evaluated in the April 2012 Final SEIR. The SCAQMD evaluated the proposed changes to the April 2012 Final SEIR and determined that the project, as revised, would not create any new significant adverse environmental impacts or make substantially worse any existing significant adverse environmental impacts, and only minor additions or changes would be necessary to make the April 2012 Final SEIR adequate for the revised project. Since no significant adverse environmental impacts were identified, no alternatives analysis was required. The project was approved by the SCAQMD's Executive Officer.

# SOCIOECONOMIC IMPACT ANALYSES

In 2016, eight rules were amended with three of them combined into one project. Out of these eight amended rules, two rules had socioeconomic impacts. Additionally, one rule, Rule 320, did not undergo any amendments that were brought to the SCAQMD Governing Board, but because it contains a requirement for an automatic annual California Consumer Price Index (CPI) adjustment that has associated socioeconomic impacts, this rule has also been included in this summary.

Lastly, staff prepared a Socioeconomic Assessment in order to inform decision-makers and stakeholders about the potential costs and benefits of the 2016 AQMP and how the associated socioeconomic impacts would affect communities within the region. Although the 2016 AQMP was adopted at the March 3, 2017 Governing Board Meeting and not during calendar year 2016, information is provided here as it represents a substantial amount of staff time spent in 2016.

#### **Rule Amendments with Socioeconomic Impacts**

#### Amended Rule 1113—Architectural Coatings (February 2016)

Rule 1113 was amended to limit the small container exemption (SCE) for certain categories, proposed new categories with VOC limits, eliminate categories regulated under a different rule, and reduce the VOC limit of some architectural coating categories to reflect currently available products.

The amendments to Rule 1113 affected all architectural coating manufacturers and wholesalers (approximately 200) who sell architectural coatings into or within the SCAQMD. The annual cost of compliance was estimated to be \$368,000. A cost

effectiveness of \$1,150 per ton of VOC reduced was estimated from lowering the VOC limits and restricting and/or eliminating the SCE for certain categories. It has been a standard socioeconomic practice that, when the annual compliance cost is less than one million current U.S. dollars, REMI is not used to simulate jobs and macroeconomic impacts, because the resultant impacts would be diminutive relative to the baseline regional economy.

### <u>Amended Rule 1402—Control of Toxic Air Contaminants from Existing Sources;</u> <u>Amended Rule 1401—New Source Review of Toxic Air Contaminants; and Amended</u> <u>Rule 307.1—Alternative Fees for Air Toxics Emissions Inventory (October 2016)</u>

At its June 2015 meeting, the SCAQMD Governing Board adopted Rule 1402—Control of Toxic Air Contaminants from Existing Sources, incorporating revised OEHHA Guidelines. The Governing Board directed staff to work with stakeholders to incentivize early risk reductions beyond those required under Rule 1402, to assess public notification procedures, and explore alternatives for such facilities. In addition, the Governing Board also directed staff to streamline implementation of Rule 1402, if necessary.

Under the amendments to Rule 1402, 32 facilities were estimated to likely participate in the Voluntary Risk Reduction Program and 24 of these would potentially need to install additional air pollution control equipment beyond the air pollution control equipment identified in the June 2015 rule amendments. The associated cost of the amendments to Rule 1402 was estimated based on the types of air pollution control equipment that could potentially reduce the total facility risk below the Voluntary Risk Threshold. The cost impacts presented herein should be viewed with the caveat that all additional costs are voluntary. Facilities that do not wish to participate may follow the traditional risk assessment and reduction pathway for which all costs were already analyzed in the June 2015 rule amendments.

The associated total annual compliance cost of implementing the amendments to Rule 1402 was estimated to range from \$1.07 million to \$1.17 million, depending on the real interest rate assumed (1%-4%). The total cost mainly consists of the cost of installing and operating control equipment. The compliance costs estimated in the analysis are associated with additional pollution control equipment costs only and do not take into account other potential costs, such as some permitting and administrative costs, as these cost would have occurred independent of the proposed amendments. There are no expected cost impacts associated with the guidance documents because these guidance documents are administrative in nature and do not impose any additional costs to the affected facilities.

SCAQMD does not conduct a dollar per ton cost effectiveness for risk-based regulations since many other factors besides the amount of pollution affects the risk such as the toxic potency and the location of receptors. Rule 1402 regulates toxics, as such the cost effectiveness analysis is not applicable here.

Amended Rule 1402 was expected to result in approximately 10 annual jobs foregone between 2017 and 2030 when it was assumed that facilities would finance capital costs of control equipment at a 4-percent real interest rate and that all equipment and services would

be purchased from businesses located within the region. The projected job impacts represent less than 0.001 percent of the total employment in the four-county region.

In combination with the amendments to Rule 1402, amended Rule 1401 removed the staff requirement to report OEHHA changes to risk values to the Governing Board and instead consolidated reporting changes and their potential impacts in the SCAQMD AB 2588 Annual Report. The amendments to Rule 1401 were intended to provide additional clarity and were administrative in nature, and therefore, were determined to not have any adverse socioeconomic impacts.

Rule 307.1 was amended with Rules 1401 and 1402 to include a fee for Voluntary Risk Reduction facilities and a provision to either directly pay or reimburse the SCAQMD for costs associated with public meetings. The fee for Voluntary Risk Reduction facilities is identical to the fee the facilities would have had to pay with traditional risk reduction, and in some cases is less if the facility is required to submit a Health Risk Assessment and/or Risk Reduction Plan. The fee for public meetings is identical to the cost of the facility conducting their own public meeting. The amended requirements in Rule 307.1 were intended to provide additional clarity and are administrative and informational in nature, and would not have any adverse socioeconomic impacts.

# **Existing Rule with Ongoing Socioeconomic Impacts**

# <u>Rule 320—Automatic Adjustment Based on Consumer Price Index (CPI) for</u> <u>Regulation III Fees (March 2016)</u>

Pursuant to Rule 320, an across-the-board 2.4-percent increase in fee rates (equivalent to the change in the California CPI from December 2014 to December 2015) occurred on July 1, 2016. The October 29, 2010 SCAQMD Governing Board Resolution annually requires, by March 15, an assessment of the increase in fee rates based on the previous year's CPI. Rule 320 does not affect air quality or emission limits and as such no socioeconomic and cost effectiveness analyses are required. A socioeconomic assessment was nonetheless conducted to assess the cost impacts of the fee increase. In addition, the analysis provides background information, such as historical trends of SCAQMD revenues from various fees and sectoral distributions of these fees.

Nearly all the facilities regulated by the SCAQMD would be affected by the proposed fee increases and these facilities belong to every sector of the economy. The fees examined included emissions fees, permit processing fees, annual permit renewal fees, toxic hot spot fees, source testing fees, and a portion of fees under Rule 2202 – On-Road Motor Vehicle Mitigation Options.

The across-the-board CPI-based fee rate increase would bring additional revenue totaling \$1.94 million to the SCAQMD. Based on the fee categories examined in the analysis, the manufacturing sector as a whole would experience the largest increase in fees (approximately \$0.84 million for about 4,000 facilities), followed by the services sector (approximately \$0.35 million for about 11,000 facilities) and the retail trade sector (approximately \$0.24

million for about 4,100 facilities). Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, will experience an increase of approximately \$0.36 million.

# **Rule Amendments without Socioeconomic Impacts**

# Amended Rule 1110.2—Emissions from Gaseous and Liquid-Fueled Engines (June 2016)

Rule 1110.2 regulates oxides of nitrogen (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emissions from liquid and gas fueled internal combustion engines operating in the SCAQMD producing more than 50 rated brake horsepower (bhp). Amended Rule 1110.2 delayed implementation of new concentration limits for biogas-fired engines at affected facilities from 2016 to between 2017 and 2019. In addition, amended Rule 1110.2 would affect fewer biogas-fired engines. The additional time for compliance and five fewer affected engines would result in potential savings for affected facilities. As such, no adverse socioeconomic impact was anticipated for amended Rule 1110.2.

# Amended Rule 2002—Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) (October 2016)

Regulation XX was amended on December 4, 2015 to achieve programmatic NOx RECLAIM trading credit (RTC) reductions from compliance years 2016 through 2022. Among the proposed amendments considered at that time was a provision to address RTCs from the shutdown of facilities. The Governing Board motion that was approved did not include the shutdown provisions and directed staff to return to the Governing Board, after further analysis and discussion with the RECLAIM working group, with a proposal that would allow a closer alignment of shutdown credits in the RECLAIM program and command and control programs, short of full forfeiture.

Amendments to Rule 2002 were crafted to prevent NOx RTCs associated with a facility shutdown from entering the market and potentially delaying the installation of pollution controls at other RECLAIM facilities. Specifically, the amendments established the criteria for determining a facility shutdown and the methodology to calculate the amount of NOx RTCs by which that facility's future holdings would be reduced. Amended Rule 2002 included exclusions from these provisions for facilities under the same ownership and for facilities with approved planned non-operational status for up to five years.

Rule 2002, as amended, would not be expected to create new socioeconomic impacts resulting in new or more severe significant effects beyond those analyzed in the previous Final Socioeconomic Report for the December 4, 2015 amendments to Regulation XX. Specifically, staff acknowledged in the previous report that the provision of surrendering and retiring NOx RTCs from the market could potentially affect the credit market and prices, and that the magnitude of the potential impact would depend heavily on the usual market behavior of each facility before it decides to shut down. In the same report, a market analysis was included which analyzed the potential incremental compliance cost for the affected

facilities under various credit price scenarios, from no effects on the current market price to the worst-case scenario where the discrete NOx RTC price reaches the threshold of \$22,500 per ton and thus would trigger the price stabilizing mechanism set forth in Rule 2002.

# Amended Rule 1302—Definitions; and, Amended Rule 1325—Federal PM2.5 New Source Review Program (November 2016)

Amended Rule 1302 set the definitions used in Regulation XIII—New Source Review. Since the amendments were administrative in nature, no socioeconomic impacts were expected.

Rule 1325 incorporates U.S. EPA's requirements for PM2.5 into Regulation XIII – New Source Review. The rule mirrors federal requirements and is applicable to major polluting facilities, which are defined by rule as sources with actual emissions, or the potential to emit, 100 tons per year or more of PM2.5 or its precursors. Based on comments received from the U.S. EPA regarding SIP approvability of Rule 1325, amendments were adopted to incorporate administrative changes to definitions, provisions and exclusions.

No socioeconomic impact assessment was required for amended Rule 1325 because the amendments do not "significantly affect air quality or emissions limitations." (Health and Safety Code Section 40440.8(a)).

# 2016 AQMP Socioeconomic Assessment

In order to inform decision-makers and stakeholders about the potential costs and benefits of the 2016 AQMP and how the associated socioeconomic impacts would affect communities within the region, a Socioeconomic Assessment was prepared. Based on recommendations made by Abt Associates in 2014 to improve the socioeconomic assessment, a concerted effort among SCAQMD staff, scientific advisors, sister agencies, the public, and the business community was made to conduct an enhanced analysis that not only utilized state-of-the-art methods, but was more accessible and transparent to the general public. While many of Abt Associates' recommendations have been implemented, staff continues to update and refine its methodologies for subsequent AQMPs and socioeconomic assessments for clean air rules and programs.

The analyses in the 2016 AQMP Socioeconomic Assessment were conducted using two major modeling tools: the Regional Economic Model, Inc. (REMI)'s Policy Insight Plus, a policy simulation program for regional macroeconomic impacts, and the U.S. Environmental Protection Agency's environmental Benefits Mapping and Analysis program (BenMAP). Total incremental costs, inclusive of the cost of incentives, were compiled for proposed control measures with quantified emission reductions. Modeled air quality data for the Basin, together with mathematical functions and parameters based on the most updated epidemiological and economic studies, were used in BenMAP to quantify public health benefits due to reduced exposure to air pollution. Public health benefits were combined with incremental costs to estimate a range of regional jobs and other macroeconomic impacts from implementing the Final 2016 AQMP. Projected changes in health risk and monetized public

health benefits were also used to analyze how implementation of the Final 2016 AQMP may affect environmental justice (EJ) in the Basin, as evaluated by a number of alternative metrics.

#### Enhancements made to the 2016 AQMP Socioeconomic Assessment

First and foremost, this report was designed to be accessible and transparent to the general public. The main document presented the general picture of socioeconomic impacts while clearly defining methodologies employed and data sources utilized. Careful consideration was given to report not only overall impacts, but to also discuss uncertainty and provide a range of estimates through sensitivity analyses. When quantification of uncertainty was not feasible, a qualitative discussion about uncertainty sources, the expected magnitude, and impact of uncertainty (i.e. negative or positive effect on results) was added. In addition, the appendices provided technical readers with more details about the analyses, while an executive summary geared towards a more general audience condensed the analyses and results. As each component of the 2016 Socioeconomic Assessment was developed, it was presented at various meetings to the STMPR Advisory Group, the AQMP Advisory Group, and interested parties to enhance transparency and solicit feedback. Staff also presented the preliminary outline of this report and described analysis methodologies at six AQMP scoping meetings in July 2016.

To implement Abt's recommendation to clearly define the baseline for socioeconomic analysis and clarify whether the baseline should include SCAG's TCMs, staff worked closely with SCAG staff and consultants from REMI and the Center for Continuing Study of the California Economy. Following many rounds of communication and discussions, consensus was reached that TCMs, along with other components of the 2016 RTP/SCS, should be considered as baseline for the 2016 AQMP socioeconomic assessment, and that, for informational purposes, the benefits and costs associated with TCMs would be provided separately in the 2016 AQMP Appendix IV-C: Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures. This baseline definition is also consistent with the AQMP baseline inventory of air pollutant emissions, which considers any emission reductions associated with SCAG's 2016 RTP/SCS and all its sub-components (TCMs included) as accounted for in the baseline. Additionally, as in the past, the default baseline forecasts of population and jobs in the REMI model were adjusted in accordance with the population and job projections from SCAG's 2016 Growth Forecast, which was also largely used to project future baseline emissions of air pollutants.

In order to improve the public health benefits analysis conducted in the socioeconomic assessment, SCAQMD commissioned IEc to conduct an updated literature review of epidemiological studies to quantify concentration-response functions, which quantitatively describe the relationship between exposure to air pollution and various health endpoints, and economic valuation functions, which are used to monetize quantified public health benefits. Based on the review of literature, IEc provided staff with recommendations on which health endpoints to include in the public health benefits analysis of the Final 2016 AQMP and which mathematical functions should be used to evaluate and quantify benefits. IEc also provided recommendations on the use of the U.S. EPA's BenMAP tool, including choices of

data input, assumptions and procedures that were appropriate for the functions used in the analysis. IEc recommendations and the analysis results were presented during each step of the process to the STMPR Advisory Group for review and guidance. In addition to IEc recommendations, the BenMAP operations were further reviewed and confirmed as appropriate by Dr. Jin Huang, a former project manager for the 2014 Abt review and the STMPR expert on BenMAP analysis.

IEc also reviewed the most updated literature of environmental justice studies and analytical tools. Based on the review, IEc recommended alternative EJ screening definitions and the most appropriate screening tools that have been developed to help identify EJ communities for socioeconomic assessment purposes. Additionally, IEc recommended the state-of-science methodology to analyze the impacts of the 2016 AQMP on health risk distributions between and within EJ and non-EJ communities. To engage the community and develop the most applicable approach in the region, the 2016 AQMP Socioeconomic Assessment Environmental Justice Working Group was formed to review and provide comments and suggestions on IEc's recommendations and staff's analysis results. The Working Group's feedback helped inform and enhance the EJ analyses in this report.

Finally, SCAQMD commissioned a third-party evaluation by Dr. Michael Lahr on REMI's modeling of nonmarket benefits and Abt's further recommendation to evaluate how to improve the input of these benefits into REMI. REMI models non-market benefits as an improvement to regional amenities, or quality of life; however, the 2014 Abt Report indicated that there remained methodological uncertainties as to how these benefits could be best incorporated into macroeconomic modeling and asked staff to keep abreast of developments at the U.S. EPA's Science Advisory Board Panel on Economy-Wide Modeling. While it is generally recognized that location-specific amenities such as climate, clean air, public safety, and other public service provisions, make a region more attractive to economic migrants, the 2014 Abt Report also indicated that prospective economic migrants may consider air quality differently than other types of amenities when making their location choices; however, such differences, if any, were not taken into account under the prior modeling approach. As such, Abt recommended identifying methods to properly normalize the magnitude of adjustments made to the sub-region specific amenity coefficients in REMI's migration equation, which links air quality change with the relative attractiveness of one area compared to another. Based on the qualitative conclusion made in the third-party evaluation, staff conducted a sensitivity analysis of job impacts where the REMI input related to the nonmarket portion of public health benefits was discounted by half, therefore significantly lessening the magnitude of adjustments to the amenity coefficients in REMI. Staff preliminarily concluded that this adjustment is a major determinant to the non-market benefits related job impact; however, further research is needed to determine the proper scaling of the related REMI input.

#### **Future Enhancements**

Staff will continue working to update the technical aspects of its analyses which includes updating methodologies to quantify visibility, material, and agricultural benefits, developing methods to properly normalize the magnitude of adjustment to the amenity coefficient in REMI, evaluating the use of other modeling tools such as partial equilibrium modeling to supplement REMI for small scale impacts, updating best practices for estimating small business impacts, and closely monitoring the U.S. EPA Science Advisory Board's Economy-Wide Modeling Panel discussions and recommendations, particularly on the macroeconomic modeling of non-market benefits. Retrospective studies, when feasible, will be considered as part of the implementation plan to enhance the uncertainty analysis.

# CHAPTER II ENGINEERING AND PERMITTING ACTIVITIES

# **ENGINEERING AND PERMITTING**

As shown in Table 1 below, during calendar year 2016, SCAQMD dispositioned a total of 9,872 applications. The majority of these applications were for Permits to Operate (3,725), Area Sources & Certified/Registrations (2,327), and Changes of Operators (1,511). Also, 1,200 permits were not renewed. The total number of dispositioned applications for 2016 is about 13% higher than the total for 2015, mainly attributed to the SCAQMD's Permit Application Backlog Reduction efforts.

TABLE	- 1
Permit Applications Completed	During Calendar Year 2016
Туре	Count
Permits to Construct	595
Permits to Operate	3725*
Changes of Operator	1511
Denials	77
Cancellations	784
ERCs	185
Plans	270
TV/RECLAIM	398
Area Sources & Certified/Registrations	2327
Total	9872
Permits Not Renewed	1200

\*This includes 1,454 applications for Permit to Construct that were issued as Permit to Construct/Operate.

		Per	mit Appl	lications C		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
111219	Other Vegetable (except Potato) and Melon Farming	0	0	0	0	0	0	0	0	6	0	6
111310	Orange Groves	0	0	0	0	0	0	0	0	3	0	3
111320	Citrus (except Orange) Groves	0	1	0	0	0	0	0	0	0	0	1
111332	Grape Vineyards	0	0	0	0	0	0	0	0	4	0	4
111421	Nursery and Tree Production	0	0	0	0	0	0	0	0	0	1	1
111998	All Other Miscellaneous Crop Farming	0	1	0	0	0	0	0	0	1	1	3
112120	Dairy Cattle and Milk Production	0	1	0	0	0	0	1	0	0	4	6
112310	Chicken Egg Production	0	0	0	0	0	0	0	0	0	2	2
112990	All Other Animal Production	0	4	1	0	1	0	0	0	2	0	8
115112	Soil Preparation, Planting, and Cultivating	0	2	0	0	0	0	0	0	0	0	2
115114	Postharvest Crop Activities (except Cotton Ginning)	0	1	0	0	0	0	0	0	0	0	1
115210	Support Activities for Animal Production	0	2	0	0	1	0	0	0	0	0	3
211111	Crude Petroleum and Natural Gas Extraction	13	43	4	0	50	1	20	26	6	1	164
212299	All Other Metal Ore Mining	0	0	0	0	0	0	0	0	0	2	2

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
212311	Dimension Stone Mining and Quarrying	0	4	0	0	0	0	0	0	0	0	4
212312	Crushed and Broken Limestone Mining and Quarrying	0	2	0	0	0	0	0	0	0	0	2
212321	Construction Sand and Gravel Mining	0	7	0	0	2	0	0	0	0	0	9
213112	Support Activities for Oil and Gas Operations	14	12	17	0	9	3	1	7	1	0	64
221118	Other Electric Power Generation	1	17	0	0	36	20	0	7	4	3	88
221122	Electric Power Distribution	0	0	0	0	0	0	0	0	1	0	1
221210	Natural Gas Distribution	0	15	0	0	0	0	0	1	0	0	16
221310	Water Supply and Irrigation Systems	0	55	0	0	1	0	8	9	11	20	104
221320	Sewage Treatment Facilities	0	16	0	0	0	0	0	0	0	0	16
236115	New Single-Family Housing Construction (except For-Sale Builders)	0	11	1	0	0	0	4	0	14	9	39
236116	New Multifamily Housing Construction (except For- Sale Builders)	0	0	0	0	0	0	0	0	3	1	4
236118	Residential Remodelers	1	0	0	0	0	0	0	0	32	9	42
236210	Industrial Building Construction	0	0	0	0	0	0	0	0	7	0	7

Г

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
236220	Commercial and Institutional Building Construction	0	13	0	0	0	0	8	0	8	6	35
237110	Water and Sewer Line and Related Structures Construction	0	5	0	2	1	0	2	0	0	1	11
237120	Oil and Gas Pipeline and Related Structures Construction	0	0	1	4	0	0	1	0	0	6	12
237210	Land Subdivision	2	4	0	0	1	0	0	0	13	4	24
237310	Highway, Street, and Bridge Construction	9	24	0	0	3	0	2	1	7	0	46
237990	Other Heavy and Civil Engineering Construction	0	8	0	0	0	0	3	1	0	9	21
238110	Poured Concrete Foundation and Structure Contractors	0	3	1	0	0	0	2	0	0	5	11
238130	Framing Contractors	0	1	0	0	0	0	0	1	0	1	3
238140	Masonry Contractors	2	1	0	0	0	0	0	0	0	0	3
238160	Roofing Contractors	0	6	4	0	2	0	0	4	2	7	25
238190	Other Foundation, Structure, and Building Exterior Contractors	0	0	0	0	1	0	0	0	0	0	1
238210	Electrical Contractors and Other Wiring Installation Contractors	13	1	0	0	0	0	1	2	3	20	40

г

		Per	mit App	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
238220	Plumbing, Heating, and Air- Conditioning Contractors	0	6	0	0	0	0	1	2	2	1	12
238310	Drywall and Insulation Contractors	0	1	0	0	0	0	0	0	6	10	17
238320	Painting and Wall Covering Contractors	2	6	0	0	1	0	0	0	2	4	15
238340	Tile and Terrazzo Contractors	0	2	0	0	0	0	0	0	0	0	2
238350	Finish Carpentry Contractors	0	3	0	0	0	0	0	0	0	1	4
238390	Other Building Finishing Contractors	0	3	0	0	0	0	0	0	0	0	3
238910	Site Preparation Contractors	0	1	0	0	1	0	7	0	32	47	88
238990	All Other Specialty Trade Contractors	2	22	0	0	11	0	5	0	95	17	152
311111	Dog and Cat Food Manufacturing	1	0	0	0	1	0	0	2	0	0	4
311119	Other Animal Food Manufacturing	0	1	0	0	0	0	0	0	0	0	1
311211	Flour Milling	0	7	30	0	0	0	0	0	0	0	37
311225	Fats and Oils Refining and Blending	0	0	0	0	0	0	0	0	1	0	1
311340	Nonchocolate Confectionery Manufacturing	0	1	0	0	0	0	0	0	0	0	1

Г

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	0	1	0	0	0	0	0	0	0	0	1
311412	Frozen Specialty Food Manufacturing	0	1	0	0	0	0	0	0	2	0	3
311422	Specialty Canning	0	0	0	0	0	0	0	0	1	0	1
311511	Fluid Milk Manufacturing	0	0	0	0	0	0	0	0	2	0	2
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	0	2	0	0	0	0	0	0	0	0	2
311611	Animal (except Poultry) Slaughtering	0	0	0	0	3	0	0	0	5	0	8
311613	Rendering and Meat Byproduct Processing	0	0	0	0	0	0	0	0	1	0	1
311710	Seafood Product Preparation and Packaging	0	2	0	0	0	0	0	0	0	0	2
311811	Retail Bakeries	0	8	0	0	0	0	1	1	0	0	10
311812	Commercial Bakeries	9	7	0	0	11	0	0	3	31	0	61
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	0	0	0	0	5	0	0	0	0	0	5
311821	Cookie and Cracker Manufacturing	0	4	0	0	2	0	0	0	1	0	7
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	0	12	1	0	0	0	0	0	0	0	13

- E

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
311830	Tortilla Manufacturing	0	2	0	0	0	0	0	0	0	0	2
311911	Roasted Nuts and Peanut Butter Manufacturing	4	0	9	0	0	0	0	0	0	0	13
311920	Coffee and Tea Manufacturing	0	5	0	0	2	0	0	0	0	0	7
311930	Flavoring Syrup and Concentrate Manufacturing	0	3	0	0	8	0	0	0	1	0	12
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	0	1	0	0	0	0	0	0	0	0	1
311942	Spice and Extract Manufacturing	0	3	0	0	1	0	0	1	4	0	9
311999	All Other Miscellaneous Food Manufacturing	5	15	0	0	2	0	0	0	2	0	24
312111	Soft Drink Manufacturing	1	1	0	0	0	0	0	0	2	0	4
312112	Bottled Water Manufacturing	0	1	0	0	0	0	0	0	0	0	1
312120	Breweries	0	3	0	0	0	0	0	3	5	0	11
313210	Broadwoven Fabric Mills	1	3	0	0	6	0	0	3	0	2	15
313310	Textile and Fabric Finishing Mills	0	5	0	0	0	0	0	1	2	8	16
313320	Fabric Coating Mills	0	1	0	0	2	0	0	1	0	0	4
314110	Carpet and Rug Mills	0	0	0	0	2	0	0	0	0	0	2
314120	Curtain and Linen Mills	0	0	0	0	0	0	0	1	0	0	1

		Per	mit Appl	lications C		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
314999	All Other Miscellaneous Textile Product Mills	0	4	0	0	0	0	0	0	0	0	4
315190	Other Apparel Knitting Mills	2	3	0	0	0	0	0	0	0	0	5
315240	Women's, Girls', and Infants' Cut and Sew Apparel Manufacturing	0	1	0	0	0	0	0	0	0	0	1
316210	Footwear Manufacturing	0	0	0	0	1	0	0	0	0	0	1
321113	Sawmills	0	0	0	0	0	0	0	0	0	1	1
321911	Wood Window and Door Manufacturing	0	2	0	0	0	0	0	0	0	3	5
321918	Other Millwork (including Flooring)	0	1	0	0	0	0	0	0	0	3	4
321991	Manufactured Home (Mobile Home) Manufacturing	0	9	0	0	0	0	1	3	0	0	13
321999	All Other Miscellaneous Wood Product Manufacturing	0	0	0	0	0	0	0	0	0	2	2
322121	Paper (except Newsprint) Mills	1	8	0	0	9	0	0	4	0	0	22
322130	Paperboard Mills	0	10	0	0	1	0	0	4	0	0	15
322211	Corrugated and Solid Fiber Box Manufacturing	0	9	6	0	0	0	0	5	1	0	21

- E

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
322212	Folding Paperboard Box Manufacturing	1	0	0	0	0	0	0	1	0	0	2
322219	Other Paperboard Container Manufacturing	0	1	2	0	0	0	0	0	0	0	3
322220	Paper Bag and Coated and Treated Paper Manufacturing	0	10	0	0	0	0	0	0	0	8	18
322299	All Other Converted Paper Product Manufacturing	2	0	0	0	5	0	0	1	1	3	12
323111	Commercial Printing (except Screen and Books)	5	50	8	0	7	1	1	8	3	15	98
323113	Commercial Screen Printing	0	1	0	0	0	0	0	3	0	0	4
324110	Petroleum Refineries	8	18	363	0	36	5	18	53	0	0	501
324120	Asphalt Paving, Roofing, and Saturated Materials Manufacturing	0	0	9	0	0	0	0	0	0	0	9
324121	Asphalt Paving Mixture and Block Manufacturing	9	17	0	0	0	0	0	5	0	0	31
324122	Asphalt Shingle and Coating Materials Manufacturing	7	7	0	0	9	2	0	6	0	0	31
324191	Petroleum Lubricating Oil and Grease Manufacturing	2	23	0	0	7	2	0	2	0	0	36

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
325110	Petrochemical Manufacturing	1	2	0	0	0	0	0	0	2	0	5
325120	Industrial Gas Manufacturing	0	4	0	0	2	1	1	1	0	0	9
325130	Synthetic Dye and Pigment Manufacturing	8	23	0	0	0	0	0	0	0	0	31
325180	Other Basic Inorganic Chemical Manufacturing	6	13	0	0	4	0	0	2	1	0	26
325199	All Other Basic Organic Chemical Manufacturing	0	0	0	0	3	0	0	0	0	0	3
325211	Plastics Material and Resin Manufacturing	3	10	0	0	8	0	0	0	2	1	24
325212	Synthetic Rubber Manufacturing	0	0	0	0	2	0	0	0	0	0	2
325311	Nitrogenous Fertilizer Manufacturing	0	9	0	0	0	0	0	0	0	0	9
325312	Phosphatic Fertilizer Manufacturing	0	1	0	0	0	0	0	0	0	0	1
325320	Pesticide and Other Agricultural Chemical Manufacturing	0	2	0	0	0	0	0	0	0	0	2
325411	Medicinal and Botanical Manufacturing	0	6	0	0	0	0	0	0	0	0	6
325412	Pharmaceutical Preparation Manufacturing	2	8	4	0	0	1	0	0	10	0	25

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
325414	Biological Product (except Diagnostic) Manufacturing	1	0	0	0	0	0	0	1	0	0	2
325510	Paint and Coating Manufacturing	1	20	0	0	1	0	0	0	1	0	23
325520	Adhesive Manufacturing	0	9	0	0	0	0	0	0	0	0	9
325611	Soap and Other Detergent Manufacturing	0	11	0	0	0	0	0	0	0	0	11
325613	Surface Active Agent Manufacturing	0	0	0	0	0	0	0	1	0	0	1
325620	Toilet Preparation Manufacturing	0	6	0	0	0	0	0	0	2	0	8
325910	Printing Ink Manufacturing	0	5	0	0	10	0	0	0	0	0	15
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	0	9	0	0	0	0	0	0	2	0	11
326111	Plastics Bag and Pouch Manufacturing	2	7	0	0	1	0	0	0	0	0	10
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	1	3	0	0	6	0	1	2	0	0	13
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	0	2	0	0	0	0	1	1	0	12	16
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	0	4	0	0	1	0	0	0	0	0	5

		Per	mit App	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
326160	Plastics Bottle Manufacturing	0	13	0	0	0	0	0	0	0	0	13
326199	All Other Plastics Product Manufacturing	14	48	0	0	1	0	0	5	0	2	70
326299	All Other Rubber Product Manufacturing	0	7	0	0	7	0	0	0	0	0	14
327120	Clay Building Material and Refractories Manufacturing	1	10	0	0	4	0	0	0	1	0	16
327211	Flat Glass Manufacturing	0	1	0	0	0	0	0	0	0	0	1
327212	Other Pressed and Blown Glass and Glassware Manufacturing	0	3	0	0	0	0	0	1	0	0	4
327213	Glass Container Manufacturing	6	1	0	0	0	0	0	1	0	0	8
327215	Glass Product Manufacturing Made of Purchased Glass	0	1	0	0	0	0	0	0	1	0	2
327310	Cement Manufacturing	0	0	0	0	10	0	2	0	1	0	13
327320	Ready-Mix Concrete Manufacturing	0	24	0	0	0	0	0	0	0	0	24
327331	Concrete Block and Brick Manufacturing	0	8	0	0	0	0	0	0	0	0	8
327390	Other Concrete Product Manufacturing	4	15	12	0	1	0	0	3	0	0	35

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
327410	Lime Manufacturing	0	0	14	0	0	0	0	0	0	0	14
327420	Gypsum Product Manufacturing	3	0	0	0	0	0	0	1	0	0	4
327910	Abrasive Product Manufacturing	0	0	0	0	3	0	0	0	0	0	3
327991	Cut Stone and Stone Product Manufacturing	0	2	0	0	0	0	0	0	0	0	2
327992	Ground or Treated Mineral and Earth Manufacturing	2	1	0	0	1	0	0	2	0	0	6
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	0	3	2	0	0	0	0	0	0	0	5
331110	Iron and Steel Mills and Ferroalloy Manufacturing	0	3	6	0	0	0	0	0	1	0	10
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	1	0	0	0	0	0	0	0	0	6	7
331221	Rolled Steel Shape Manufacturing	0	0	0	0	0	0	0	0	0	1	1
331222	Steel Wire Drawing	0	0	0	0	0	0	0	0	0	1	1
331315	Aluminum Sheet, Plate, and Foil Manufacturing	0	2	0	0	0	0	0	0	0	0	2
331318	Other Aluminum Rolling, Drawing, and Extruding	0	5	0	0	1	0	0	0	0	0	6

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding	0	8	0	0	2	0	0	0	0	0	10
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	4	12	0	0	11	0	4	5	0	0	36
331511	Iron Foundries	0	1	0	0	0	0	0	0	0	0	1
331512	Steel Investment Foundries	0	0	0	0	0	0	1	0	0	0	1
331523	Nonferrous Metal Die- Casting Foundries	0	5	0	0	0	0	0	0	0	4	9
331524	Aluminum Foundries (except Die-Casting)	0	9	0	0	3	0	0	0	0	0	12
331529	Other Nonferrous Metal Foundries (except Die- Casting)	0	2	0	0	0	0	0	0	0	5	7
332111	Iron and Steel Forging	0	1	0	0	0	0	0	0	0	0	1
332112	Nonferrous Forging	2	11	0	0	3	0	0	2	0	0	18
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	0	1	0	0	0	0	0	0	0	0	1
332182	#N/A	0	0	9	0	0	0	0	0	0	0	9

		Per	mit App	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
332216	Saw Blade and Handtool Manufacturing	0	0	0	0	0	0	0	1	0	0	1
332311	Prefabricated Metal Building and Component Manufacturing	0	2	0	0	0	0	0	1	0	0	3
332312	Fabricated Structural Metal Manufacturing	2	2	0	0	4	0	0	2	0	0	10
332313	Plate Work Manufacturing	0	4	0	0	0	0	0	0	0	2	6
332321	Metal Window and Door Manufacturing	0	2	0	0	0	0	0	0	0	0	2
332322	Sheet Metal Work Manufacturing	1	17	0	1	0	0	1	1	1	10	32
332323	Ornamental and Architectural Metal Work Manufacturing	0	1	0	1	0	0	0	0	0	2	4
332431	Metal Can Manufacturing	0	2	0	0	0	0	0	0	2	0	4
332439	Other Metal Container Manufacturing	0	7	0	0	0	0	1	0	0	0	8
332510	Hardware Manufacturing	2	4	3	0	0	0	0	0	1	1	11
332613	Spring Manufacturing	0	3	0	0	0	0	0	0	0	0	3
332618	Other Fabricated Wire Product Manufacturing	0	5	0	0	1	0	0	0	0	0	6

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
332710	Machine Shops	29	0	1	0	1	0	0	0	1	2	34
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	8	21	15	0	6	0	0	0	0	0	50
332811	Metal Heat Treating	0	2	0	0	0	0	0	1	1	0	4
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	9	50	0	0	7	0	0	6	3	15	90
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	31	66	13	0	23	0	0	0	7	17	157
332911	Industrial Valve Manufacturing	0	0	0	0	0	0	0	0	0	1	1
332912	Fluid Power Valve and Hose Fitting Manufacturing	0	4	0	0	0	0	0	0	0	0	4
332919	Other Metal Valve and Pipe Fitting Manufacturing	0	5	0	0	0	0	0	0	0	1	6
332994	Small Arms, Ordnance, and Ordnance Accessories Manufacturing	1	0	0	0	0	0	0	0	0	0	1
332996	Fabricated Pipe and Pipe Fitting Manufacturing	0	1	0	0	0	0	0	0	0	0	1

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	2	6	0	0	0	0	0	2	0	0	10
333111	Farm Machinery and Equipment Manufacturing	0	1	0	0	0	0	0	0	0	0	1
333120	Construction Machinery Manufacturing	0	1	0	0	0	0	0	0	0	0	1
333132	Oil and Gas Field Machinery and Equipment Manufacturing	1	1	0	0	1	0	0	0	0	0	3
333241	Food Product Machinery Manufacturing	0	2	0	0	0	0	0	0	0	0	2
333314	Optical Instrument and Lens Manufacturing	1	0	0	0	0	0	0	0	0	0	1
333316	Photographic and Photocopying Equipment Manufacturing	0	0	0	0	1	0	0	0	0	1	2
333318	Other Commercial and Service Industry Machinery Manufacturing	0	2	0	0	0	0	0	0	1	0	3
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	0	1	0	0	0	0	0	0	0	0	1
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment	0	1	0	0	0	0	0	0	1	1	3

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
	Manufacturing											
333511	Industrial Mold Manufacturing	0	0	0	0	0	0	0	0	0	6	6
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	2	5	0	1	0	0	0	0	0	3	11
333517	Machine Tool Manufacturing	0	1	0	0	0	0	0	0	0	1	2
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	0	0	0	0	0	0	0	1	0	0	1
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	0	1	0	0	0	0	0	0	0	0	1
333911	Pump and Pumping Equipment Manufacturing	0	1	0	0	2	0	0	0	0	0	3
333921	Elevator and Moving Stairway Manufacturing	0	3	0	0	0	0	0	0	0	0	3
333922	Conveyor and Conveying Equipment Manufacturing	2	0	0	1	0	0	0	0	0	0	3
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	0	3	0	0	0	0	0	0	0	0	3

		Per	mit App	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
333991	Power-Driven Handtool Manufacturing	0	2	0	0	0	0	0	0	0	0	2
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	0	0	0	0	0	0	0	0	1	0	1
334111	Electronic Computer Manufacturing	0	0	0	0	0	0	0	0	5	0	5
334112	Computer Storage Device Manufacturing	0	0	0	0	0	0	0	0	1	0	1
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	0	1	0	0	0	0	0	0	4	0	5
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	1	9	0	0	1	0	0	2	8	0	21
334310	Audio and Video Equipment Manufacturing	0	0	0	0	0	0	0	0	0	1	1
334412	Bare Printed Circuit Board Manufacturing	0	0	0	0	0	0	0	0	0	1	1
334413	Semiconductor and Related Device Manufacturing	0	26	1	0	5	0	0	0	0	0	32
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	0	2	0	0	2	0	0	0	2	0	6

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	1	8	16	0	0	0	0	1	0	5	31
334419	Other Electronic Component Manufacturing	0	9	1	0	1	0	1	2	4	0	18
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	0	1	0	0	3	0	0	0	2	0	6
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	1	8	0	0	4	0	0	3	2	0	18
334514	Totalizing Fluid Meter and Counting Device Manufacturing	0	1	0	0	0	0	0	0	0	0	1
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	0	0	0	0	0	0	0	0	2	0	2
334516	Analytical Laboratory Instrument Manufacturing	0	2	0	0	0	0	0	0	4	0	6
334613	Blank Magnetic and Optical Recording Media Manufacturing	0	14	0	0	0	0	0	0	0	0	14

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	0	14	0	0	7	0	0	0	0	1	22
335110	Electric Lamp Bulb and Part Manufacturing	1	1	0	0	0	0	0	1	0	0	3
335121	Residential Electric Lighting Fixture Manufacturing	0	2	0	0	1	0	0	0	0	0	3
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	3	4	0	0	1	0	0	0	0	0	8
335129	Other Lighting Equipment Manufacturing	0	5	0	0	1	0	0	0	0	0	6
335221	Household Cooking Appliance Manufacturing	0	7	0	0	0	0	0	0	0	0	7
335311	Power, Distribution, and Specialty Transformer Manufacturing	0	2	0	0	0	0	0	0	0	0	2
335312	Motor and Generator Manufacturing	0	0	0	0	0	1	0	1	0	0	2
335313	Switchgear and Switchboard Apparatus Manufacturing	0	1	0	0	0	0	0	0	0	0	1
335314	Relay and Industrial Control Manufacturing	0	0	0	0	15	0	0	5	0	0	20

		Per	mit Appl	ications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
335911	Storage Battery Manufacturing	0	2	2	0	0	0	0	0	0	0	4
335931	Current-Carrying Wiring Device Manufacturing	0	5	0	0	1	0	0	0	0	0	6
335932	Noncurrent-Carrying Wiring Device Manufacturing	0	2	0	0	0	0	0	1	0	0	3
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	0	7	0	0	0	0	0	0	1	2	10
336111	Automobile Manufacturing	0	1	0	0	0	0	0	0	0	1	2
336120	Heavy Duty Truck Manufacturing	0	1	0	1	0	0	0	0	0	0	2
336211	Motor Vehicle Body Manufacturing	0	1	0	0	0	0	0	0	0	0	1
336214	Travel Trailer and Camper Manufacturing	0	3	0	0	1	0	1	2	0	0	7
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	0	0	0	0	0	0	0	0	0	1	1
336360	Motor Vehicle Seating and Interior Trim Manufacturing	0	1	0	0	0	0	0	0	0	0	1
336390	Other Motor Vehicle Parts Manufacturing	1	7	0	0	0	0	1	0	0	2	11
336411	Aircraft Manufacturing	5	30	0	0	12	0	0	5	2	0	54

		Per	mit App	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
336412	Aircraft Engine and Engine Parts Manufacturing	4	2	0	0	1	0	0	0	1	0	8
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	16	22	22	1	5	0	0	8	5	0	79
336414	Guided Missile and Space Vehicle Manufacturing	0	4	0	0	4	0	0	0	1	0	9
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	0	29	0	0	0	0	0	2	0	0	31
336611	Ship Building and Repairing	0	1	0	0	0	0	0	0	0	0	1
336612	Boat Building	0	0	0	0	0	0	0	0	0	2	2
336991	Motorcycle, Bicycle, and Parts Manufacturing	0	8	0	0	0	0	0	0	0	0	8
337110	Wood Kitchen Cabinet and Countertop Manufacturing	0	5	0	0	0	0	0	0	0	2	7
337121	Upholstered Household Furniture Manufacturing	0	2	0	0	0	0	0	0	0	6	8
337122	Nonupholstered Wood Household Furniture Manufacturing	0	4	0	0	1	0	0	2	0	0	7
337124	Metal Household Furniture Manufacturing	0	5	0	0	0	0	0	1	0	1	7

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
337125	Household Furniture (except Wood and Metal) Manufacturing	0	2	0	0	0	0	0	0	0	0	2
337127	Institutional Furniture Manufacturing	0	4	0	0	0	0	0	0	0	0	4
337211	Wood Office Furniture Manufacturing	0	2	0	0	0	0	0	0	0	4	6
337212	Custom Architectural Woodwork and Millwork Manufacturing	0	1	0	0	0	0	0	0	0	1	2
337214	Office Furniture (except Wood) Manufacturing	0	4	0	0	0	0	0	3	0	0	7
337215	Showcase, Partition, Shelving, and Locker Manufacturing	1	2	0	0	0	0	0	0	0	1	4
337910	Mattress Manufacturing	0	0	1	0	1	0	0	0	2	7	11
339112	Surgical and Medical Instrument Manufacturing	0	0	2	0	0	0	0	1	9	0	12
339113	Surgical Appliance and Supplies Manufacturing	0	0	0	0	0	0	0	1	0	0	1
339114	Dental Equipment and Supplies Manufacturing	3	10	0	0	0	0	0	0	0	0	13
339115	Ophthalmic Goods Manufacturing	4	9	0	0	4	0	0	0	0	0	17
339116	Dental Laboratories	0	0	0	0	0	0	0	0	1	0	1
339910	Jewelry and Silverware Manufacturing	0	1	0	0	0	0	0	0	0	7	8

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
339920	Sporting and Athletic Goods Manufacturing	0	0	0	0	0	0	0	0	0	1	1
339930	Doll, Toy, and Game Manufacturing	0	3	0	0	0	0	0	0	0	0	3
339940	Office Supplies (except Paper) Manufacturing	0	0	0	0	0	0	0	0	4	0	4
339950	Sign Manufacturing	0	10	0	0	0	0	0	0	0	2	12
339991	Gasket, Packing, and Sealing Device Manufacturing	0	2	0	0	0	0	0	0	0	2	4
339992	Musical Instrument Manufacturing	0	2	0	0	0	0	0	0	1	0	3
339999	All Other Miscellaneous Manufacturing	0	9	0	0	0	0	0	1	4	12	26
423110	Automobile and Other Motor Vehicle Merchant Wholesalers	0	5	0	0	0	0	2	0	0	2	9
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	5	11	2	0	2	0	1	0	0	10	31
423130	Tire and Tube Merchant Wholesalers	0	1	0	0	0	0	0	0	0	1	2
423140	Motor Vehicle Parts (Used) Merchant Wholesalers	0	0	0	0	1	0	0	0	0	0	1
423210	Furniture Merchant Wholesalers	0	2	0	0	0	0	0	0	0	0	2

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
423220	Home Furnishing Merchant Wholesalers	0	2	0	0	0	0	0	0	0	0	2
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers	0	0	0	0	0	0	0	1	0	0	1
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers	4	14	0	0	0	0	0	1	0	0	19
423410	Photographic Equipment and Supplies Merchant Wholesalers	0	2	0	0	0	0	0	0	0	0	2
423420	Office Equipment Merchant Wholesalers	0	1	0	0	0	0	0	0	0	0	1
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	0	5	0	0	4	0	0	0	0	0	9
423440	Other Commercial Equipment Merchant Wholesalers	0	0	0	0	0	0	0	0	0	1	1
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	0	3	0	0	0	0	0	0	2	3	8
423510	Metal Service Centers and Other Metal Merchant Wholesalers	0	4	0	0	0	0	0	0	0	0	4

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	0	3	0	0	1	0	0	0	2	0	6
423690	Other Electronic Parts and Equipment Merchant Wholesalers	0	1	0	0	0	0	0	0	1	0	2
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	0	2	0	1	1	0	0	0	0	0	4
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0	3	0	0	3	0	0	0	0	0	6
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	0	3	0	1	2	0	0	0	0	0	6
423830	Industrial Machinery and Equipment Merchant Wholesalers	0	9	0	0	4	0	0	1	10	1	25
423840	Industrial Supplies Merchant Wholesalers	3	23	0	1	3	0	0	0	1	1	32
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	0	1	0	0	0	0	0	0	0	2	3

		Per	mit App	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	0	2	0	0	0	0	0	0	0	0	2
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers	0	3	0	0	0	0	0	0	0	0	3
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers	7	4	0	0	0	0	0	1	1	0	13
423930	Recyclable Material Merchant Wholesalers	2	13	0	2	1	0	0	0	4	13	35
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	0	1	0	0	0	0	0	0	0	0	1
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	0	6	0	0	2	0	0	0	1	0	9
424130	Industrial and Personal Service Paper Merchant Wholesalers	0	6	0	0	0	0	0	0	0	0	6
424210	Drugs and Druggists' Sundries Merchant Wholesalers	2	2	0	0	1	0	0	0	0	0	5
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers	0	1	0	0	0	0	0	0	2	0	3
424340	Footwear Merchant Wholesalers	0	0	0	0	0	0	0	0	0	1	1

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
424410	General Line Grocery Merchant Wholesalers	0	1	0	0	0	0	0	0	0	0	1
424420	Packaged Frozen Food Merchant Wholesalers	1	9	12	0	0	0	0	0	1	0	23
424450	Confectionery Merchant Wholesalers	0	0	0	0	0	0	0	0	1	0	1
424460	Fish and Seafood Merchant Wholesalers	0	0	0	0	0	0	0	0	3	0	3
424470	Meat and Meat Product Merchant Wholesalers	0	0	0	0	0	0	0	0	1	0	1
424490	Other Grocery and Related Products Merchant Wholesalers	0	3	0	0	2	0	0	0	1	0	6
424590	Other Farm Product Raw Material Merchant Wholesalers	0	0	0	0	0	0	0	0	0	2	2
424690	Other Chemical and Allied Products Merchant Wholesalers	0	13	0	0	2	0	0	0	0	0	15
424710	Petroleum Bulk Stations and Terminals	0	6	74	0	3	0	8	6	0	0	97
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	1	13	1	1	13	0	0	2	3	0	34

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	0	0	0	0	0	0	0	0	3	0	3
424910	Farm Supplies Merchant Wholesalers	0	12	0	0	0	0	0	0	0	0	12
424950	Paint, Varnish, and Supplies Merchant Wholesalers	1	11	1	0	0	0	0	0	0	1	14
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers	0	3	0	0	0	0	1	0	0	2	6
441110	New Car Dealers	5	27	3	0	5	0	0	0	3	4	47
441120	Used Car Dealers	1	6	0	0	0	0	0	0	0	0	7
441222	Boat Dealers	0	1	0	0	0	0	0	0	0	0	1
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers	1	1	1	0	1	0	1	0	0	1	6
441310	Automotive Parts and Accessories Stores	0	8	0	1	0	0	0	0	0	2	11
442110	Furniture Stores	0	3	0	0	1	0	0	0	0	1	5
442210	Floor Covering Stores	3	0	0	0	0	0	0	2	0	0	5
442299	All Other Home Furnishings Stores	0	2	0	0	0	0	0	0	0	0	2
443141	Household Appliance Stores	0	0	0	0	0	0	0	0	1	0	1
443142	Electronics Stores	0	0	0	0	0	0	0	0	3	0	3

г

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
444110	Home Centers	0	7	0	0	8	0	0	1	5	2	23
444120	Paint and Wallpaper Stores	0	3	0	0	0	0	0	0	0	1	4
444130	Hardware Stores	0	1	0	0	0	0	0	0	0	0	1
444190	Other Building Material Dealers	0	4	0	0	0	0	0	0	0	6	10
444220	Nursery, Garden Center, and Farm Supply Stores	0	0	0	0	0	0	0	0	0	2	2
445110	Supermarkets and Other Grocery (except Convenience) Stores	0	18	0	2	1	1	0	1	251	12	286
445120	Convenience Stores	4	52	0	0	2	0	1	0	0	3	62
445291	Baked Goods Stores	0	0	0	0	0	0	0	0	0	1	1
445299	All Other Specialty Food Stores	0	1	0	0	0	0	0	0	0	2	3
445310	Beer, Wine, and Liquor Stores	0	1	0	0	0	0	0	0	0	1	2
446110	Pharmacies and Drug Stores	0	2	0	0	1	0	0	0	13	0	16
446120	Cosmetics, Beauty Supplies, and Perfume Stores	0	5	0	0	0	0	0	0	0	0	5
446130	Optical Goods Stores	0	1	0	0	0	0	0	0	0	0	1
446199	All Other Health and Personal Care Stores	0	0	1	0	0	0	0	0	0	0	1
447100	Gasoline Stations	1	0	0	0	0	0	0	0	0	0	1

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
447110	Gasoline Stations with Convenience Stores	0	1	0	0	0	0	0	0	0	0	1
447190	Other Gasoline Stations	42	209	126	0	8	0	2	10	4	14	415
448110	Men's Clothing Stores	0	0	0	0	0	0	0	0	2	0	2
448120	Women's Clothing Stores	0	0	0	0	2	0	0	1	1	0	4
448140	Family Clothing Stores	0	0	0	0	0	0	0	0	1	1	2
448310	Jewelry Stores	0	0	0	0	0	0	1	0	0	0	1
451110	Sporting Goods Stores	0	0	0	0	0	0	0	0	0	1	1
451130	Sewing, Needlework, and Piece Goods Stores	0	0	3	0	1	0	0	0	1	0	5
451211	Book Stores	0	2	0	0	0	0	1	0	17	0	20
452111	Department Stores (except Discount Department Stores)	0	3	0	0	0	0	0	0	2	2	7
452112	Discount Department Stores	0	2	0	0	0	0	0	0	0	0	2
452910	Warehouse Clubs and Supercenters	1	33	0	0	3	108	0	0	0	0	145
452990	All Other General Merchandise Stores	0	2	0	0	0	0	0	0	0	0	2
453110	Florists	0	0	0	0	0	0	0	0	3	0	3
453210	Office Supplies and Stationery Stores	0	1	0	0	0	0	0	0	0	0	1
453220	Gift, Novelty, and Souvenir Stores	0	7	2	0	0	0	0	2	3	0	14
453310	Used Merchandise Stores	2	2	0	0	0	0	0	0	1	0	5

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
453910	Pet and Pet Supplies Stores	1	0	0	0	0	0	0	0	0	0	1
453920	Art Dealers	0	0	0	0	0	0	0	0	1	1	2
453930	Manufactured (Mobile) Home Dealers	0	7	0	0	0	0	1	2	0	0	10
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)	0	14	0	0	2	0	0	1	7	0	24
454113	Mail-Order Houses	0	1	0	0	0	0	1	0	3	0	5
454210	Vending Machine Operators	0	3	0	0	0	0	0	1	0	0	4
454310	Fuel Dealers	0	4	0	0	1	0	0	0	0	3	8
454390	Other Direct Selling Establishments	0	2	0	0	0	0	0	0	1	0	3
481111	Scheduled Passenger Air Transportation	0	14	1	0	1	1	1	3	1	0	22
481219	Other Nonscheduled Air Transportation	0	0	0	1	0	0	0	0	0	0	1
482111	Line-Haul Railroads	0	4	0	0	0	0	0	0	0	0	4
483112	Deep Sea Passenger Transportation	0	0	0	0	0	0	0	0	0	2	2
484110	General Freight Trucking, Local	0	1	0	0	0	0	1	2	2	3	9
484121	General Freight Trucking, Long-Distance, Truckload	0	2	0	0	0	0	0	0	1	0	3
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	0	4	0	0	0	0	0	0	0	0	4

		Per	mit Appl	lications (		LE - 2 ed During	calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
485111	Mixed Mode Transit Systems	0	3	0	0	0	0	0	0	0	0	3
485112	Commuter Rail Systems	0	1	0	0	0	0	0	0	0	0	1
485113	Bus and Other Motor Vehicle Transit Systems	0	6	0	0	1	0	0	1	1	0	9
485310	Taxi Service	0	0	0	0	0	0	0	0	1	0	1
485320	Limousine Service	0	0	0	0	0	0	0	0	1	0	1
485410	School and Employee Bus Transportation	0	0	0	0	0	0	0	0	1	0	1
485999	All Other Transit and Ground Passenger Transportation	0	0	0	0	0	0	0	0	0	1	1
486110	Pipeline Transportation of Crude Oil	0	1	5	0	0	0	1	3	0	0	10
486210	Pipeline Transportation of Natural Gas	0	45	0	0	0	1	0	4	0	0	50
488110	Airport Operations	0	14	0	0	1	0	0	5	0	0	20
488111	Air Traffic Control	0	0	0	0	0	0	0	0	0	1	1
488119	Other Airport Operations	0	4	0	1	0	0	0	1	5	0	11
488190	Other Support Activities for Air Transportation	0	1	0	0	0	0	0	0	0	0	1
488210	Support Activities for Rail Transportation	0	12	0	0	5	0	1	1	0	0	19
488320	Marine Cargo Handling	0	2	0	0	0	0	1	0	0	0	3

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
488410	Motor Vehicle Towing	0	1	0	0	1	0	0	0	0	0	2
488490	Other Support Activities for Road Transportation	0	1	0	0	0	0	0	0	2	0	3
488510	Freight Transportation Arrangement	0	1	1	1	0	0	1	0	0	0	4
488991	Packing and Crating	0	1	0	0	0	0	0	0	0	1	2
488999	All Other Support Activities for Transportation	1	6	0	0	2	0	1	1	2	0	13
491110	Postal Service	0	0	0	0	0	0	0	0	4	1	5
492210	Local Messengers and Local Delivery	0	1	0	0	0	0	0	0	0	0	1
493110	General Warehousing and Storage	7	8	0	8	2	0	0	1	8	0	34
493120	Refrigerated Warehousing and Storage	0	1	0	0	0	0	0	0	0	0	1
493190	Other Warehousing and Storage	0	12	0	0	2	0	2	5	0	0	21
511110	Newspaper Publishers	0	0	0	0	0	0	0	0	1	0	1
511120	Periodical Publishers	0	0	0	0	0	0	0	0	1	0	1
511199	All Other Publishers	0	1	0	0	3	0	0	0	0	6	10
512110	Motion Picture and Video Production	0	9	0	0	0	0	1	1	12	1	24
512131	Motion Picture Theaters (except Drive-Ins)	0	2	0	0	0	0	0	0	0	0	2

Г

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
512132	Drive-In Motion Picture Theaters	0	0	0	0	0	0	0	0	1	0	1
512191	Teleproduction and Other Postproduction Services	0	9	0	0	0	0	0	0	0	0	9
512199	Other Motion Picture and Video Industries	0	1	0	0	0	0	0	0	0	1	2
512240	Sound Recording Studios	0	0	0	0	0	0	0	0	1	0	1
515120	Television Broadcasting	0	7	0	1	0	0	1	0	1	2	12
515210	Cable and Other Subscription Programming	0	1	0	0	0	0	1	0	4	2	8
517110	Wired Telecommunications Carriers	0	1	0	0	0	0	0	0	0	0	1
517210	Wireless Telecommunications Carriers (except Satellite)	0	19	188	0	2	0	0	0	16	1	226
517410	Satellite Telecommunications	0	0	0	0	0	0	0	0	0	2	2
517911	Telecommunications Resellers	0	5	0	0	7	0	1	0	54	0	67
517919	All Other Telecommunications	0	1	0	1	1	0	0	0	1	1	5
518210	Data Processing, Hosting, and Related Services	0	2	0	0	0	0	0	0	0	0	2
519120	Libraries and Archives	0	0	0	2	0	0	1	0	14	0	17
522110	Commercial Banking	0	5	1	0	1	0	0	0	6	0	13

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
522120	Savings Institutions	0	0	0	0	0	0	0	0	0	2	2
522130	Credit Unions	0	2	0	0	0	0	1	0	5	0	8
522220	Sales Financing	0	0	0	0	0	0	0	0	2	0	2
522291	Consumer Lending	0	1	0	0	0	0	0	0	0	0	1
522292	Real Estate Credit	0	1	0	0	0	0	0	0	0	0	1
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities	0	3	0	0	0	0	0	1	1	0	5
523110	Investment Banking and Securities Dealing	0	0	0	1	0	0	0	0	1	0	2
523120	Securities Brokerage	0	0	0	0	0	0	0	0	0	1	1
523910	Miscellaneous Intermediation	2	4	0	0	0	0	0	0	3	1	10
523930	Investment Advice	0	2	1	0	0	0	0	0	1	0	4
523991	Trust, Fiduciary, and Custody Activities	0	0	0	0	1	0	0	0	2	1	4
523999	Miscellaneous Financial Investment Activities	0	1	0	0	0	0	0	0	0	0	1
524113	Direct Life Insurance Carriers	0	1	0	0	0	0	0	0	0	0	1
524114	Direct Health and Medical Insurance Carriers	0	2	0	0	0	0	0	0	1	2	5
524126	Direct Property and Casualty Insurance Carriers	0	0	0	0	0	0	0	0	2	0	2

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
524210	Insurance Agencies and Brokerages	0	2	0	0	0	0	0	0	4	5	11
524298	All Other Insurance Related Activities	0	0	0	0	0	0	0	0	17	0	17
525110	Pension Funds	0	1	0	0	0	0	0	0	0	0	1
531110	Lessors of Residential Buildings and Dwellings	0	37	9	0	1	0	1	1	27	2	78
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	0	2	3	0	1	0	3	0	18	0	27
531190	Lessors of Other Real Estate Property	0	0	1	0	0	0	0	0	3	1	5
531210	Offices of Real Estate Agents and Brokers	0	24	4	0	0	0	1	0	31	7	67
531311	Residential Property Managers	0	1	0	0	0	0	0	0	0	0	1
531312	Nonresidential Property Managers	2	7	14	0	0	0	1	0	8	2	34
531390	Other Activities Related to Real Estate	0	2	0	0	0	0	0	0	0	0	2
532111	Passenger Car Rental	0	2	0	0	0	0	0	0	1	0	3
532112	Passenger Car Leasing	0	0	0	0	0	0	0	0	1	0	1
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing	0	0	0	0	0	0	0	0	1	0	1
532220	Formal Wear and Costume Rental	0	2	0	0	0	0	0	0	0	1	3

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
532299	All Other Consumer Goods Rental	0	0	0	0	0	0	0	0	0	1	1
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	0	6	0	0	0	0	0	0	0	1	7
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	0	13	0	0	2	0	0	0	44	4	63
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	0	2	0	1	0	0	0	0	0	0	3
541110	Offices of Lawyers	0	1	0	0	0	0	0	0	5	0	6
541213	Tax Preparation Services	0	0	0	0	0	0	0	0	1	0	1
541310	Architectural Services	0	4	0	0	5	0	0	0	0	1	10
541320	Landscape Architectural Services	8	14	0	0	3	0	0	0	5	0	30
541330	Engineering Services	0	8	0	0	4	0	9	0	43	15	79
541380	Testing Laboratories	0	7	0	1	1	0	0	0	3	0	12
541410	Interior Design Services	0	3	0	0	0	0	0	1	0	0	4
541420	Industrial Design Services	0	0	0	0	0	0	0	0	1	0	1
541430	Graphic Design Services	0	1	0	0	2	0	0	0	0	0	3

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
541511	Custom Computer Programming Services	0	1	0	0	0	0	0	0	0	1	2
541512	Computer Systems Design Services	1	1	0	0	0	0	0	0	1	2	5
541519	Other Computer Related Services	0	0	0	0	0	0	1	0	0	0	1
541611	Administrative Management and General Management Consulting Services	0	11	1	1	2	0	1	0	19	3	38
541612	Human Resources Consulting Services	0	0	0	0	0	0	0	0	1	0	1
541613	Marketing Consulting Services	0	0	0	0	0	3	0	0	0	1	4
541614	Process, Physical Distribution, and Logistics Consulting Services	0	1	0	0	0	0	0	0	0	0	1
541618	Other Management Consulting Services	0	7	0	0	0	0	0	0	1	2	10
541620	Environmental Consulting Services	0	9	1	0	3	0	17	0	23	34	87
541690	Other Scientific and Technical Consulting Services	0	0	2	1	1	0	1	0	3	0	8
541711	Research and Development in Biotechnology	0	4	0	0	0	0	0	0	2	0	6

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)	1	25	0	0	0	0	2	0	5	1	34
541720	Research and Development in the Social Sciences and Humanities	0	0	0	0	0	0	0	0	2	0	2
541810	Advertising Agencies	0	1	0	0	0	0	0	0	2	0	3
541830	Media Buying Agencies	0	0	0	0	0	0	0	0	1	0	1
541850	Outdoor Advertising	1	1	0	0	0	0	0	0	0	0	2
541860	Direct Mail Advertising	0	1	0	0	0	0	0	0	0	0	1
541890	Other Services Related to Advertising	0	2	0	0	0	0	0	0	0	0	2
541910	Marketing Research and Public Opinion Polling	1	2	0	0	0	0	0	0	2	0	5
541921	Photography Studios, Portrait	0	0	0	0	0	0	0	0	1	0	1
541940	Veterinary Services	0	2	1	0	0	0	0	0	0	0	3
541990	All Other Professional, Scientific, and Technical Services	2	8	0	0	2	0	1	0	8	65	86
551112	Offices of Other Holding Companies	0	6	0	0	0	0	0	1	16	0	23

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
561110	Office Administrative Services	8	10	1	0	1	0	1	1	13	1	36
561210	Facilities Support Services	0	0	1	0	0	0	3	0	0	0	4
561410	Document Preparation Services	0	0	0	0	0	0	0	0	0	1	1
561421	Telephone Answering Services	0	0	0	0	0	0	1	0	0	0	1
561431	Private Mail Centers	0	0	0	0	0	0	0	0	1	0	1
561440	Collection Agencies	0	1	0	2	0	0	0	0	0	0	3
561491	Repossession Services	0	0	0	0	0	0	0	0	0	3	3
561499	All Other Business Support Services	6	17	1	0	4	0	1	0	2	0	31
561510	Travel Agencies	0	1	1	0	0	0	0	0	0	0	2
561612	Security Guards and Patrol Services	0	1	0	0	0	0	0	0	0	0	1
561621	Security Systems Services (except Locksmiths)	0	0	0	0	0	0	0	0	1	0	1
561720	Janitorial Services	1	5	3	1	0	0	0	0	11	3	24
561730	Landscaping Services	0	3	0	0	1	0	0	0	0	3	7
561790	Other Services to Buildings and Dwellings	0	9	1	0	1	0	0	0	2	2	15
561910	Packaging and Labeling Services	2	8	0	0	0	0	0	0	0	0	10
561990	All Other Support Services	1	6	2	1	2	0	2	1	4	10	29

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
562112	Hazardous Waste Collection	0	4	0	0	0	0	2	0	0	0	6
562211	Hazardous Waste Treatment and Disposal	0	6	0	0	0	0	1	0	7	0	14
562212	Solid Waste Landfill	1	22	0	0	8	0	2	3	3	1	40
562219	Other Nonhazardous Waste Treatment and Disposal	0	1	0	0	3	0	0	0	0	0	4
562910	Remediation Services	0	9	0	0	3	0	2	0	57	148	219
562920	Materials Recovery Facilities	0	8	2	0	8	0	1	4	2	7	32
562998	All Other Miscellaneous Waste Management Services	0	2	0	0	0	0	0	0	0	0	2
611110	Elementary and Secondary Schools	0	25	2	4	2	0	0	0	72	9	114
611210	Junior Colleges	0	2	0	0	0	0	1	2	14	0	19
611310	Colleges, Universities, and Professional Schools	0	34	1	0	1	1	2	6	31	1	77
611519	Other Technical and Trade Schools	0	11	0	0	0	0	0	0	0	0	11
611620	Sports and Recreation Instruction	0	1	0	0	0	0	0	0	0	0	1
611699	All Other Miscellaneous Schools and Instruction	0	0	0	0	0	0	0	0	1	0	1
611710	Educational Support Services	6	0	0	0	0	0	0	0	0	0	6

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
621111	Offices of Physicians (except Mental Health Specialists)	0	8	0	0	8	0	1	0	16	1	34
621112	Offices of Physicians, Mental Health Specialists	0	5	0	0	0	0	1	1	6	0	13
621210	Offices of Dentists	0	0	0	0	0	0	0	0	1	1	2
621310	Offices of Chiropractors	0	0	0	0	0	0	0	0	1	0	1
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	0	0	0	0	0	0	0	0	1	0	1
621399	Offices of All Other Miscellaneous Health Practitioners	0	0	0	0	0	0	0	0	1	0	1
621491	HMO Medical Centers	0	0	0	0	0	0	0	0	1	0	1
621492	Kidney Dialysis Centers	0	0	0	0	0	0	0	0	0	1	1
621493	Freestanding Ambulatory Surgical and Emergency Centers	0	1	0	0	0	0	0	0	0	0	1
621498	All Other Outpatient Care Centers	1	0	0	0	0	0	0	0	0	0	1
621610	Home Health Care Services	0	2	1	0	0	0	0	0	0	0	3
621991	Blood and Organ Banks	0	0	0	0	0	0	0	0	1	0	1
621999	All Other Miscellaneous Ambulatory Health Care Services	1	6	1	0	0	0	0	0	8	4	20
622110	General Medical and Surgical Hospitals	0	31	0	0	3	0	5	7	45	4	95

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
622210	Psychiatric and Substance Abuse Hospitals	0	6	0	0	4	0	0	0	1	0	11
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals	0	2	0	0	0	0	0	0	2	0	4
623110	Nursing Care Facilities (Skilled Nursing Facilities)	0	10	0	0	1	0	0	0	3	0	14
623311	Continuing Care Retirement Communities	0	1	0	0	0	0	0	0	1	0	2
623312	Assisted Living Facilities for the Elderly	0	3	0	0	0	0	0	0	1	0	4
623990	Other Residential Care Facilities	0	5	0	2	0	0	0	0	0	0	7
624120	Services for the Elderly and Persons with Disabilities	0	3	0	0	0	0	0	0	5	2	10
624190	Other Individual and Family Services	0	2	0	0	0	0	0	0	5	0	7
624410	Child Day Care Services	0	0	0	1	0	0	0	0	0	0	1
711130	Musical Groups and Artists	0	4	0	0	0	0	0	0	1	0	5
711190	Other Performing Arts Companies	0	2	0	0	2	0	0	0	2	1	7
711211	Sports Teams and Clubs	0	0	0	0	0	0	0	0	4	0	4
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	0	2	1	0	0	0	0	0	7	0	10

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	0	0	0	0	0	0	0	0	5	0	5
711510	Independent Artists, Writers, and Performers	0	4	0	0	2	0	0	0	1	0	7
712110	Museums	0	1	0	0	1	0	0	0	3	1	6
712130	Zoos and Botanical Gardens	0	0	0	0	0	0	0	0	1	0	1
713110	Amusement and Theme Parks	5	17	0	0	0	0	0	5	3	0	30
713910	Golf Courses and Country Clubs	0	11	0	0	0	0	0	0	2	2	15
713940	Fitness and Recreational Sports Centers	1	8	0	0	2	0	1	2	12	0	26
713990	All Other Amusement and Recreation Industries	0	0	0	0	0	0	0	0	1	0	1
721110	Hotels (except Casino Hotels) and Motels	0	17	0	1	0	0	0	0	51	5	74
721120	Casino Hotels	0	0	0	0	0	0	0	0	2	0	2
721214	Recreational and Vacation Camps (except Campgrounds)	0	2	0	0	0	0	0	0	0	0	2
722310	Food Service Contractors	2	0	0	0	0	0	0	0	0	0	2
722320	Caterers	0	1	0	0	0	0	0	0	1	0	2
722410	Drinking Places (Alcoholic Beverages)	0	0	0	1	0	0	0	0	2	4	7

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
722511	Full-Service Restaurants	3	1	0	0	1	0	0	0	144	67	216
722513	Limited-Service Restaurants	3	5	0	0	0	0	2	0	20	50	80
722514	Cafeterias, Grill Buffets, and Buffets	0	0	0	0	0	0	0	0	1	0	1
722515	Snack and Nonalcoholic Beverage Bars	0	0	0	0	0	0	0	0	0	1	1
811111	General Automotive Repair	4	25	3	2	3	0	2	1	1	8	49
811112	Automotive Exhaust System Repair	0	0	1	0	0	0	0	0	0	0	1
811113	Automotive Transmission Repair	0	0	0	0	0	0	0	0	0	2	2
811118	Other Automotive Mechanical and Electrical Repair and Maintenance	0	9	0	0	10	0	0	1	0	2	22
811121	Automotive Body, Paint, and Interior Repair and Maintenance	65	156	107	0	9	0	0	3	0	53	393
811192	Car Washes	0	7	0	0	0	0	0	0	1	2	10
811198	All Other Automotive Repair and Maintenance	0	3	1	0	0	0	0	0	0	0	4
811219	Other Electronic and Precision Equipment Repair and Maintenance	0	7	0	0	4	0	2	0	1	1	15
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and	1	11	1	0	0	0	0	0	1	0	14

		Per	mit App	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
	Maintenance											
811412	Appliance Repair and Maintenance	0	6	1	0	0	0	0	0	2	0	9
811420	Reupholstery and Furniture Repair	0	4	0	0	0	0	0	0	0	7	11
811490	Other Personal and Household Goods Repair and Maintenance	0	5	0	0	0	0	0	0	0	0	5
812112	Beauty Salons	0	5	0	0	0	0	0	1	1	0	7
812113	Nail Salons	0	0	0	0	0	0	0	0	1	0	1
812210	Funeral Homes and Funeral Services	2	5	1	0	0	0	0	0	0	1	9
812220	Cemeteries and Crematories	6	5	0	0	0	0	0	0	6	0	17
812310	Coin-Operated Laundries and Drycleaners	0	1	0	0	0	0	0	0	0	2	3
812320	Drycleaning and Laundry Services (except Coin- Operated)	0	49	4	2	1	0	0	0	6	46	108
812331	Linen Supply	6	2	1	0	0	0	0	1	2	0	12
812332	Industrial Launderers	0	1	0	0	2	0	0	0	0	0	3
812910	Pet Care (except Veterinary) Services	0	0	0	0	0	0	0	0	2	1	3
812930	Parking Lots and Garages	0	1	0	0	1	0	0	0	0	0	2

		Per	mit Appl	lications (		LE - 2 ed During	Calen	dar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
812990	All Other Personal Services	0	1	0	0	0	0	0	0	0	0	1
813110	Religious Organizations	0	7	0	0	0	0	0	0	2	1	10
813212	Voluntary Health Organizations	0	1	0	0	0	0	0	0	1	0	2
813312	Environment, Conservation and Wildlife Organizations	0	0	0	0	0	0	0	0	1	0	1
813319	Other Social Advocacy Organizations	0	1	0	0	0	0	0	0	0	0	1
813410	Civic and Social Organizations	0	2	0	0	0	0	0	0	4	0	6
813910	Business Associations	0	18	0	0	21	0	0	2	2	0	43
813920	Professional Organizations	0	1	0	0	0	0	0	0	0	1	2
813930	Labor Unions and Similar Labor Organizations	0	4	0	0	1	0	0	2	0	0	7
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)	0	4	0	3	2	0	0	0	16	0	25
921110	Executive Offices	0	30	0	2	2	0	0	1	14	1	50
921120	Legislative Bodies	2	11	0	0	0	0	0	0	3	1	17
921190	Other General Government Support	1	7	3	2	0	0	0	1	8	0	22
922110	Courts	0	7	0	0	3	0	2	0	9	1	22
922120	Police Protection	0	10	0	1	0	0	1	4	27	0	43

		Per	mit Appl	lications (		LE - 2 ed During	Calen	ıdar Ye	ar 2016			
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
922130	Legal Counsel and Prosecution	0	1	0	0	0	0	0	0	0	0	1
922140	Correctional Institutions	0	2	0	0	1	0	0	0	8	0	11
922150	Parole Offices and Probation Offices	0	3	0	0	0	0	0	0	0	0	3
922160	Fire Protection	0	12	0	0	0	0	0	0	0	0	12
922190	Other Justice, Public Order, and Safety Activities	0	0	0	0	0	0	1	0	1	0	2
923120	Administration of Public Health Programs	0	2	0	0	0	0	1	0	1	0	4
923130	Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs Programs)	0	0	0	0	1	0	0	0	3	0	4
923140	Administration of Veterans' Affairs	0	4	0	0	0	0	0	2	3	0	9
924110	Administration of Air and Water Resource and Solid Waste Management Programs	8	38	0	4	14	0	0	4	11	0	79
924120	Administration of Conservation Programs	1	7	0	0	0	0	0	0	0	0	8
925120	Administration of Urban Planning and Community and Rural Development	0	0	0	0	1	0	0	0	1	0	2

	TABLE - 2         Permit Applications Completed During Calendar Year 2016											
NAICS Code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	TV/ RECLAIM	Area Source/Cert. & Registration	Not Renewed	Grand Total
926120	Regulation and Administration of Transportation Programs	0	5	0	0	1	0	0	0	1	2	9
926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities	0	4	0	0	0	0	0	0	5	0	9
927110	Space Research and Technology	0	1	0	0	0	0	0	0	2	0	3
928110	National Security	0	1	0	0	0	0	0	0	0	0	1
999990	Unclassified	34	339	330	7	68	33	57	21	340	60	1289
0	TOTALS	595	3725	1511	77	784	185	270	398	2327	1200	11072

## **Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) Transactions for Fiscal Year 2015-16<sup>1</sup> (California Health and Safety Code Section 40452)**

Pursuant to paragraph (c) of section 40452 of the California Health and Safety Code, this report summarizes data on emission offset transactions and applications, by pollutant, during the previous fiscal year. Note that during Fiscal Year 2015-16, no applications were denied for a permit for a new source for the reason of failure to provide the required emission offsets.

Table 1 summarizes Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) transactions for Fiscal Year 2015-16, including totals, by pollutant, of the number of emission offset transactions and the quantity of emission offsets transferred in units of pounds per day and tons per year. Table 2 summarizes ERC banking applications processed during Fiscal Year 2015-16, including the number of newly generated STERCs by pollutant in units of pounds per day and tons per year.

Tables 3 and 4 provide details on the amount of each emission offset transaction and processed ERC banking application respectively.

Criteria Pollutant	Number of Emission Offset Transfer Transactions <sup>2</sup>			Transfer	Q	Tran	Emission Of sferred <sup>3</sup> o/day)	ffsets	Annualized Quantity of Emission Offsets Transferred <sup>3</sup> (ton/year)					
	ERC	STERC <sup>4</sup>	STERC <sup>5</sup>	TOTAL	ERC	STERC <sup>4</sup>	STERC <sup>5</sup>	TOTAL	ERC	STERC <sup>4</sup>	STERC <sup>5</sup>	TOTAL		
ROG	49	21	0	70	1,177	309	0	1,486	214.9	56.4	0	271.3		
NOX	2	0	0	2	106	0	0	106	19.4	0	0	19.4		
SOX	2	0	0	2	46	0	0	46	8.4	0	0	8.4		
СО	0	1	0	1	0	32	0	32	0	5.8	0	5.8		
PM10	24	16	0	40	74	63	0	137	13.5	11.5	0	25.0		

### Table 1: Emission Offset Transactions – Fiscal Year 2015-16

#### Table 2: Emission Offset Applications – Fiscal Year 2015-16

Criteria Pollutant	Number of Banking Applications Resulting in the Issuance of New STERCs <sup>6</sup>	Quantity of Emission Reductions Achieved (STERCs) <sup>7</sup> (lb/day)	Annualized Quantity of Emission Reductions Achieved <sup>7</sup> (ton/year)
ROG	0	0	0
NOX	0	0	0
SOX	0	0	0
СО	0	0	0
PM10	0	0	0

<sup>&</sup>lt;sup>1</sup> This report does not include RECLAIM Trading Credit (RTC) transactions.

<sup>&</sup>lt;sup>2</sup> Includes all emission offset certificates that transferred ownership.

<sup>&</sup>lt;sup>3</sup> Includes the total amount of emission offsets transferred.

<sup>&</sup>lt;sup>4</sup> STERC transfer transactions including the long term emission offset, those that have an ending year of 9999.

<sup>&</sup>lt;sup>5</sup> STERC transfer transactions not including the long term emission offset in which the emission offset with the greatest year is treated like a long

term emission offset.

<sup>&</sup>lt;sup>6</sup> Includes all emission offset applications resulting in the generation of new certificates.

<sup>&</sup>lt;sup>7</sup> Includes the total amount of emission offsets generated.

			utant and An	lount		
SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-001	ROG	1	0.2	ERC	N/A	N/A
SC1516-002	ROG	1	0.2	ERC	N/A	N/A
SC1516-003	ROG	1	0.2	ERC	N/A	N/A
SC1516-004	ROG	1	0.2	ERC	N/A	N/A
SC1516-005	ROG	1	0.2	ERC	N/A	N/A
SC1516-006	ROG	1	0.2	ERC	N/A	N/A
SC1516-007	ROG	1	0.2	ERC	N/A	N/A
SC1516-008	ROG	1	0.2	ERC	N/A	N/A
SC1516-009	ROG	1	0.2	ERC	N/A	N/A
SC1516-010	ROG	1	0.2	ERC	N/A	N/A
SC1516-011	ROG	1	0.2	ERC	N/A	N/A
SC1516-012	ROG	2	0.4	ERC	N/A	N/A
SC1516-013	ROG	0	0	STERC	2015	2015
SC1516-014	ROG	0	0	STERC	2016	2016
SC1516-015	ROG	0	0	STERC	2017	2017
SC1516-016	ROG	0	0	STERC	2018	2018
SC1516-017	ROG	2	0.4	STERC	2019	9999
SC1516-018	ROG	0	0	STERC	2015	2015
SC1516-019	ROG	0	0	STERC	2016	2016
SC1516-020	ROG	0	0	STERC	2017	2017
SC1516-021	ROG	0	0	STERC	2018	2018
SC1516-022	ROG	2	0.4	STERC	2019	9999
SC1516-023	ROG	2	0.4	ERC	N/A	N/A
SC1516-024	ROG	2	0.4	ERC	N/A	N/A
SC1516-025	ROG	2	0.4	ERC	N/A	N/A
SC1516-026	ROG	0	0	STERC	2015	2015
SC1516-027	ROG	0	0	STERC	2016	2016
SC1516-028	ROG	0	0	STERC	2017	2017
SC1516-029	ROG	0	0	STERC	2018	2018
SC1516-030	ROG	0	0	STERC	2019	2019
SC1516-031	ROG	0	0	STERC	2020	2020
SC1516-032	ROG	3	0.5	STERC	2021	9999
SC1516-033	ROG	0	0	STERC	2015	2015
SC1516-034	ROG	0	0	STERC	2016	2016
SC1516-035	ROG	0	0	STERC	2017	2017
SC1516-036	ROG	0	0	STERC	2018	2018
SC1516-037	ROG	0	0	STERC	2019	2019
SC1516-038	ROG	0	0	STERC	2020	2020
SC1516-039	ROG	3	0.5	STERC	2021	9999
SC1516-040	ROG	3	0.5	ERC	N/A	N/A
SC1516-041	ROG	3	0.5	ERC	N/A	N/A
SC1516-042	ROG	0	0	STERC	2015	2015
SC1516-043	ROG	0	0	STERC	2016	2016

 Table 3: Emission Offset Transaction Summary – Fiscal Year 2015-16

 Sorted by Pollutant and Amount

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-044	ROG	0	0	STERC	2017	2017
SC1516-045	ROG	0	0	STERC	2018	2018
SC1516-046	ROG	4	0.7	STERC	2019	9999
SC1516-047	ROG	4	0.7	ERC	N/A	N/A
SC1516-048	ROG	4	0.7	ERC	N/A	N/A
SC1516-049	ROG	0	0	STERC	2015	2015
SC1516-050	ROG	0	0	STERC	2016	2016
SC1516-051	ROG	0	0	STERC	2017	2017
SC1516-052	ROG	0	0	STERC	2018	2018
SC1516-053	ROG	0	0	STERC	2019	2019
SC1516-054	ROG	0	0	STERC	2020	2020
SC1516-055	ROG	5	0.9	STERC	2021	9999
SC1516-056	ROG	0	0	STERC	2015	2015
SC1516-057	ROG	0	0	STERC	2016	2016
SC1516-058	ROG	0	0	STERC	2017	2017
SC1516-059	ROG	0	0	STERC	2018	2018
SC1516-060	ROG	0	0	STERC	2019	2019
SC1516-061	ROG	0	0	STERC	2020	2020
SC1516-062	ROG	5	0.9	STERC	2021	9999
SC1516-063	ROG	5	0.9	ERC	N/A	N/A
SC1516-064	ROG	5	0.9	ERC	N/A	N/A
SC1516-065	ROG	6	1.1	ERC	N/A	N/A
SC1516-066	ROG	6	1.1	ERC	N/A	N/A
SC1516-067	ROG	6	1.1	STERC	2017	9999
SC1516-068	ROG	0	0	STERC	2016	2016
SC1516-069	ROG	0	0	STERC	2015	2015
SC1516-070	ROG	6	1.1	ERC	N/A	N/A
SC1516-071	ROG	6	1.1	ERC	N/A	N/A
SC1516-072	ROG	6	1.1	ERC	N/A	N/A
SC1516-073	ROG	7	1.3	ERC	N/A	N/A
SC1516-074	ROG	7	1.3	ERC	N/A	N/A
SC1516-075	ROG	7	1.3	ERC	N/A	N/A
SC1516-076	ROG	8	1.5	ERC	N/A	N/A
SC1516-077	ROG	0	0	STERC	2015	2015
SC1516-078	ROG	0	0	STERC	2016	2016
SC1516-079	ROG	0	0	STERC	2017	2017
SC1516-080	ROG	0	0	STERC	2018	2018
SC1516-081	ROG	0	0	STERC	2019	2019
SC1516-082	ROG	0	0	STERC	2020	2020
SC1516-083	ROG	8	1.5	STERC	2021	9999
SC1516-084	ROG	0	0	STERC	2015	2015
SC1516-085	ROG	0	0	STERC	2016	2016
SC1516-086	ROG	0	0	STERC	2017	2017
SC1516-087	ROG	0	0	STERC	2018	2018

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-088	ROG	0	0	STERC	2019	2019
SC1516-089	ROG	0	0	STERC	2020	2020
SC1516-090	ROG	8	1.5	STERC	2021	9999
SC1516-091	ROG	9	1.6	ERC	N/A	N/A
SC1516-092	ROG	9	1.6	ERC	N/A	N/A
SC1516-093	ROG	10	1.8	ERC	N/A	N/A
SC1516-094	ROG	10	1.8	ERC	N/A	N/A
SC1516-095	ROG	0	0	STERC	2016	2016
SC1516-096	ROG	0	0	STERC	2017	2017
SC1516-097	ROG	0	0	STERC	2018	2018
SC1516-098	ROG	10	1.8	STERC	2019	9999
SC1516-099	ROG	10	1.8	ERC	N/A	N/A
SC1516-100	ROG	11	2	ERC	N/A	N/A
SC1516-101	ROG	11	2	ERC	N/A	N/A
SC1516-102	ROG	12	2.2	ERC	N/A	N/A
SC1516-103	ROG	0	0	STERC	2016	2016
SC1516-104	ROG	0	0	STERC	2017	2017
SC1516-105	ROG	0	0	STERC	2018	2018
SC1516-106	ROG	13	2.4	STERC	2019	9999
SC1516-107	ROG	14	2.6	ERC	N/A	N/A
SC1516-108	ROG	0	0	STERC	2016	2016
SC1516-109	ROG	0	0	STERC	2017	2017
SC1516-110	ROG	0	0	STERC	2018	2018
SC1516-111	ROG	15	2.7	STERC	2019	9999
SC1516-112	ROG	0	0	STERC	2016	2016
SC1516-113	ROG	0	0	STERC	2017	2017
SC1516-114	ROG	0	0	STERC	2018	2018
SC1516-115	ROG	15	2.7	STERC	2019	9999
SC1516-116	ROG	16	2.9	ERC	N/A	N/A
SC1516-117	ROG	0	0	STERC	2016	2016
SC1516-118	ROG	0	0	STERC	2017	2017
SC1516-119	ROG	0	0	STERC	2018	2018
SC1516-120	ROG	18	3.3	STERC	2019	9999
SC1516-121	ROG	0	0	STERC	2016	2016
SC1516-122	ROG	0	0	STERC	2017	2017
SC1516-123	ROG	0	0	STERC	2018	2018
SC1516-124	ROG	0	0	STERC	2019	2019
SC1516-125	ROG	0	0	STERC	2020	2020
SC1516-126	ROG	18	3.3	STERC	2021	9999
SC1516-127	ROG	0	0	STERC	2016	2016
SC1516-128	ROG	0	0	STERC	2017	2017
SC1516-129	ROG	0	0	STERC	2018	2018
SC1516-130	ROG	18	3.3	STERC	2019	9999
SC1516-131	ROG	0	0	STERC	2015	2015

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-132	ROG	0	0	STERC	2016	2016
SC1516-133	ROG	0	0	STERC	2017	2017
SC1516-134	ROG	0	0	STERC	2018	2018
SC1516-135	ROG	19	3.5	STERC	2019	9999
SC1516-136	ROG	19	3.5	ERC	N/A	N/A
SC1516-137	ROG	23	4.2	ERC	N/A	N/A
SC1516-138	ROG	25	4.6	ERC	N/A	N/A
SC1516-139	ROG	0	0	STERC	2016	2016
SC1516-140	ROG	0	0	STERC	2017	2017
SC1516-141	ROG	0	0	STERC	2018	2018
SC1516-142	ROG	0	0	STERC	2019	2019
SC1516-143	ROG	0	0	STERC	2020	2020
SC1516-144	ROG	35	6.4	STERC	2021	9999
SC1516-145	ROG	38	6.9	ERC	N/A	N/A
SC1516-146	ROG	44	8	ERC	N/A	N/A
SC1516-147	ROG	0	0	STERC	2015	2015
SC1516-148	ROG	0	0	STERC	2016	2016
SC1516-149	ROG	0	0	STERC	2017	2017
SC1516-150	ROG	0	0	STERC	2018	2018
SC1516-151	ROG	45	8.2	STERC	2019	9999
SC1516-152	ROG	50	9.1	ERC	N/A	N/A
SC1516-153	ROG	50	9.1	ERC	N/A	N/A
SC1516-154	ROG	0	0	STERC	2015	2015
SC1516-155	ROG	0	0	STERC	2016	2016
SC1516-156	ROG	0	0	STERC	2017	2017
SC1516-157	ROG	0	0	STERC	2018	2018
SC1516-158	ROG	0	0	STERC	2019	2019
SC1516-159	ROG	0	0	STERC	2020	2020
SC1516-160	ROG	57	10.4	STERC	2021	9999
SC1516-161	ROG	213	38.9	ERC	N/A	N/A
SC1516-162	ROG	501	91.4	ERC	N/A	N/A
Т	otal	1,486	271.3		N/A	

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1516-163	NOX	1	0.2	ERC	N/A	N/A
SC1516-164	NOX	105	19.2	ERC	N/A	N/A
Total		106	19.4		N/A	

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-165	SOX	20	3.7	ERC	N/A	N/A
SC1516-166	SOX	26	4.7	ERC	N/A	N/A
Т	otal	46	8.4	N/A		
SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
			. ,			
SC1516-167	СО	0	0	STERC	2016	2016
	CO CO	0 32	0 5.8	STERC STERC	2016 2017	2016 9999
SC1516-167 SC1516-168		-	÷			

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-169	PM10	1	0.2	ERC	N/A	N/A
SC1516-170	PM10	0	0	STERC	2016	2016
SC1516-171	PM10	0	0	STERC	2017	2017
SC1516-172	PM10	0	0	STERC	2017	2017
SC1516-173	PM10	1	0.2	STERC	2019	9999
SC1516-174	PM10	1	0.2	ERC	N/A	N/A
SC1516-175	PM10	1	0.2	ERC	N/A	N/A
SC1516-176	PM10	1	0.2	ERC	N/A	N/A
SC1516-177	PM10	1	0.2	ERC	N/A	N/A
SC1516-178	PM10	1	0.2	ERC	N/A	N/A
SC1516-179	PM10	1	0.2	ERC	N/A	N/A
SC1516-180	PM10	0	0	STERC	2016	2016
SC1516-181	PM10	0	0	STERC	2017	2017
SC1516-182	PM10	0	0	STERC	2018	2018
SC1516-183	PM10	1	0.2	STERC	2019	9999
SC1516-184	PM10	0	0	STERC	2016	2016
SC1516-185	PM10	0	0	STERC	2017	2017
SC1516-186	PM10	1	0.2	STERC	2018	9999
SC1516-187	PM10	0	0	STERC	2016	2016
SC1516-188	PM10	0	0	STERC	2017	2017
SC1516-189	PM10	1	0.2	STERC	2018	9999
SC1516-190	PM10	1	0.2	ERC	N/A	N/A
SC1516-191	PM10	0	0	STERC	2016	2016
SC1516-192	PM10	0	0	STERC	2017	2017
SC1516-193	PM10	0	0	STERC	2018	2018
SC1516-194	PM10	1	0.2	STERC	2019	9999
SC1516-195	PM10	1	0.2	ERC	N/A	N/A
SC1516-196	PM10	1	0.2	ERC	N/A	N/A
SC1516-197	PM10	2	0.4	STERC	2019	9999

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR
SC1516-198	PM10	0	0	STERC	2018	2018
SC1516-199	PM10	0	0	STERC	2017	2017
SC1516-200	PM10	0	0	STERC	2016	2016
SC1516-201	PM10	0	0	STERC	2015	2015
SC1516-202	PM10	2	0.4	ERC	N/A	N/A
SC1516-203	PM10	2	0.4	ERC	N/A	N/A
SC1516-204	PM10	2	0.4	ERC	N/A	N/A
SC1516-205	PM10	3	0.5	ERC	N/A	N/A
SC1516-206	PM10	3	0.5	ERC	N/A	N/A
SC1516-207	PM10	3	0.5	ERC	N/A	N/A
SC1516-208	PM10	3	0.5	ERC	N/A	N/A
SC1516-209	PM10	3	0.5	ERC	N/A	N/A
SC1516-210	PM10	3	0.5	ERC	N/A	N/A
SC1516-211	PM10	4	0.7	STERC	2019	9999
SC1516-212	PM10	0	0	STERC	2018	2018
SC1516-213	PM10	0	0	STERC	2017	2017
SC1516-214	PM10	0	0	STERC	2016	2016
SC1516-215	PM10	0	0	STERC	2015	2015
SC1516-216	PM10	4	0.7	STERC	2019	9999
SC1516-217	PM10	0	0	STERC	2018	2018
SC1516-218	PM10	0	0	STERC	2017	2017
SC1516-219	PM10	0	0	STERC	2016	2016
SC1516-220	PM10	0	0	STERC	2015	2015
SC1516-221	PM10	4	0.7	ERC	N/A	N/A
SC1516-222	PM10	0	0	STERC	2016	2016
SC1516-223	PM10	0	0	STERC	2017	2017
SC1516-224	PM10	0	0	STERC	2018	2018
SC1516-225	PM10	5	0.9	STERC	2019	9999
SC1516-226	PM10	0	0	STERC	2016	2016
SC1516-227	PM10	0	0	STERC	2017	2017
SC1516-228	PM10	0	0	STERC	2018	2018
SC1516-229	PM10	5	0.9	STERC	2019	9999
SC1516-230	PM10	0	0	STERC	2016	2016
SC1516-231	PM10	0	0	STERC	2017	2017
SC1516-232	PM10	0	0	STERC	2018	2018
SC1516-233	PM10	5	0.9	STERC	2019	9999
SC1516-234	PM10	0	0	STERC	2016	2016
SC1516-235	PM10	0	0	STERC	2017	2017
SC1516-236	PM10	0	0	STERC	2018	2018
SC1516-237	PM10	5	0.9	STERC	2019	9999
SC1516-238	PM10	0	0	STERC	2016	2016
SC1516-239	PM10	0	0	STERC	2017	2017
SC1516-240	PM10	0	0	STERC	2018	2018
SC1516-241	PM10	5	0.9	STERC	2019	9999

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	TYPE	START YEAR	END YEAR
SC1516-242	PM10	7	1.3	ERC	N/A	N/A
SC1516-243	PM10	0	0	STERC	2016	2016
SC1516-244	PM10	0	0	STERC	2017	2017
SC1516-245	PM10	7	1.3	STERC	2018	9999
SC1516-246	PM10	0	0	STERC	2016	2016
SC1516-247	PM10	0	0	STERC	2017	2017
SC1516-248	PM10	7	1.3	STERC	2018	9999
SC1516-249	PM10	8	1.5	ERC	N/A	N/A
SC1516-250	PM10	9	1.6	STERC	2015	9999
SC1516-251	PM10	9	1.6	ERC	N/A	N/A
SC1516-252	PM10	12	2.2	ERC	N/A	N/A
Т	otal	137	25		N/A	

 Table 4: Emission Offset Application Summary – Fiscal Year 2015-16

 Sorted by Pollutant and Amount

SCAQMD NO.	POLLUTANT	AMOUNT (LB/DAY)	AMOUNT (TON/YR)	ТҮРЕ	START YEAR	END YEAR	
No Banking Application Approved during Fiscal Year 2015-16							
Total		N/A	N/A		N/A		

# CHAPTER III BUDGET AND WORK PROGRAM FISCAL YEAR 2017-2018

[Attached herein as Chapter III]

Due to the bulk of these materials, Chapters III, IV and V of this report are available on CD, online at http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-september-2017.pdf, or anyone wishing to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

## CHAPTER IV CLEAN FUELS PROGRAM 2016 ANNUAL REPORT AND 2017 PLAN UPDATE

[Attached herein as Chapter IV]

Due to the bulk of these materials, Chapters III, IV and V of this report are available on CD, online at http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-september-2017.pdf, or anyone wishing to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.

## CHAPTER V ANNUAL RECLAIM AUDIT REPORT FOR 2015 COMPLIANCE YEAR

[Attached herein as Chapter V]

Due to the bulk of these materials, Chapters III, IV and V of this report are available on CD, online at http://www.aqmd.gov/docs/default-source/LPA-Outreach/sb-1928-report-to-legislature-september-2017.pdf, or anyone wishing to obtain a hard copy may do so by contacting SCAQMD's Public Information Center at (909) 396-2001.