BOARD MEETING DATE: October 4, 2019 AGENDA NO. 21

REPORT: Report to Legislature and CARB on South Coast AQMD's

Regulatory Activities for Calendar Year 2018

SYNOPSIS: The South Coast AQMD 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 South Coast AQMD, 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 CARB.

Wayne Nastri Executive Officer

DA: FW:HC:jf

Background

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

In 1990, the Legislature directed South Coast AQMD 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 South Coast AQMD'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 provide 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 2018. The Annual RECLAIM Audit Report, which the Board approved on March 1, 2019, is also required to be submitted to the Legislature by 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 South Coast AOMD's activities:
- An update on the South Coast AQMD's Clean Fuels program; and
- The annual RECLAIM Audit Report.

Attachment

Report to the Legislature on the Regulatory Activities of the South Coast AQMD for Calendar Year 2018¹

Chapter III _-

https://www.aqmd.gov/docs/default-source/finance-budgets/fy-2019-20/fy2019-20-proposed-budget.pdf,

Chapter IV -

https://www.aqmd.gov/docs/default-source/technology-research/annual-reports-and-plan-updates/2018-annual-report-2019-plan-update.pdf; and

Chapter V -

http://www.aqmd.gov/docs/default-source/reclaim/reclaim-annual-report/reclaim-2017-audit-report.pdf.

Anyone who would like to obtain a hard copy of these materials may do so by contacting South Coast AQMD's Public Information Center at (909) 396-2001.

¹Due to the bulk of these materials, chapters III, IV and V of the report can be found online at:

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)



October 2019

Cleaning the Air that We Breathe...

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

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Wayne Nastri Executive Officer

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EXECUTIVE SUMMARY

Introduction

The South Coast Air Quality Management District (South Coast AQMD) is subject to internal and external reviews of its air quality programs. These include annual reviews of the South Coast AQMD's budget, forecast and proposed operating budget for the upcoming fiscal year, and compliance program audits. In addition, the South Coast AQMD 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 (CY). 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 2018 and CEQA Alternatives

This section contains a summary of each major rule adoption or amendment adopted by the South Coast AQMD Governing Board in the preceding CY (e.g., 2018). 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.

The South Coast AQMD has a robust public process that is used for all rulemakings that includes working group meetings, public workshops, individual stakeholder meetings, and site visits. For each rule development project, staff works with a working group that is tailored for the specific rule project that includes affected facilities, consultants, agencies, environmental, and community representatives. This allows staff to work on specific provisions and address key issues with stakeholders, with the goal to build consensus. Throughout 2018, staff held over 100 working group meetings and public workshops.

In 2018, rulemaking activities focused on addressing the transition of the NOx Regional Clean Air Incentives Market (RECLAIM) to a command-and-control regulatory structure, consistent with the 2016 AQMP and addressing air toxic issues identified through air monitoring efforts. To facilitate the transition of RECLAIM, for each type of equipment a corresponding command-and-control landing rule is needed, that establishes an emission standard that is representative of Best Available Retrofit Control Technology (BARCT). California State Assembly Bill (AB) 617, which was signed into law in July 2017, requires an expedited schedule for implementing BARCT at facilities in the state greenhouse gas cap-and-trade program. Many of these facilities are also subject to RECLAIM and implementation of BARCT is required by December 31, 2023. In 2018, four landing rules were amended to facilitate the RECLAIM transition: Rule 1135 for electric generating facilities, and Rules 1146, 1146.1, and 1146.2 for boilers and process heaters. In addition, Rule 1100 was adopted which establishes the implementation schedule for RECLAIM and former RECLAIM facilities. Rules 2001 and 2002 which are RECLAIM rules were also amended to facilitate the transition.

Rule 1469 for chrome plating and anodizing facilities was amended to establish emission standards for certain tanks with hexavalent chromium emissions that were previously unregulated. Ambient air monitoring near three plating and anodizing facilities identified the need for this rule

amendment. In addition, Rule 408 was amended to clarify circumvention provisions based on observations at facilities near ambient air monitoring conducted by the South Coast AQMD.

In 2018, other rule amendments included Rule 1178 to allow an alternative technology for floating roof tanks, with subsequent amendments to Rule 219 which corresponded to the amendments to Rule 1178, and amendments to Rule 301 for fee updates. Rule 1111 which establishes NOx emission limits for residential furnaces was amended to extend the mitigation fee to allow manufacturers additional time to meet the final compliance date. Also, in 2018, South Coast AQMD amended the BACT Guidelines and one plan (1-Hour Ozone Standard Attainment Demonstration). Of these projects, analyses of CEQA alternatives were required and conducted for Rules 1111, 1146, 1146.1, and 1146.2, and 1469.

Refer to Chapter 1 for the details regarding rule adoptions, rule amendments, and CEQA alternatives.

CEQA Lead Agency Projects

South Coast AQMD also acts as the Lead Agency under CEQA for non-South Coast AQMD projects where South Coast AQMD typically has primary approval, i.e., discretionary permitting authority. In 2018, the South Coast AQMD approved one lead agency project, the Addendum to the April 2007 Final Mitigated Negative Declaration for Southern California Edison: Barre Peaker Project, Stanton.

Refer to Chapter 1 for details regarding this lead agency project.

Socioeconomic Impact Assessments

California Health and Safety Code Section 40440.8 requires that South Coast AQMD 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, South Coast AQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 Governing Board Resolution Additionally, South Coast AQMD staff assesses socioeconomic impacts of CEQA alternatives analyzed for 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 AQMPs. Additionally, South Coast AQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of South Coast AQMD rules on Los Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to, employment and competitiveness.

In 2018, the South Coast AQMD identified and analyzed new socioeconomic impacts for four projects which include one newly adopted rule (Rule 1100) and seven amended rules (Rules 1135, 1146, 1146.1, 1146.2, 1469, 2001, and 2002). The South Coast AQMD also identified and analyzed ongoing socioeconomic impacts for one amended regulation (Regulation III). No socioeconomic impacts were identified for five projects which included amendments to seven rules (Rules 219, 301, 408, 1111, 1178, 2001, and 2002). BACT guidelines were also amended, but

posed no significant socioeconomic impacts because they did not result in more stringent requirements than would otherwise occur. Additionally, updates to the 1-hour ozone attainment demonstration were found not to pose significant socioeconomic impacts because they did not change any rules or required control measures.

Refer to Chapter 1 for details regarding the socioeconomic impact assessments.

Engineering and Permitting

Background

Section 40452 of the California Health and Safety Code requires that the South Coast AQMD submit an annual report to both the state board and Legislature that summarizes its regulatory activities for the preceding CY. 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, South Coast AQMD Rule 2015 requires submittal of annual Regional Clean Air Incentives Market (RECLAIM) Audit Reports to the Legislature.

The following paragraphs provide a brief summary for each report.

Permitting Data – CY 2018

During CY 2018, South Coast AQMD dispositioned a total of 9,726 applications. The majority of these applications were for Permits to Operate (3,440), Area Sources & Certified/ Registrations (1,556), and Changes of Operators (1,332). Also, 1,119 permits were not renewed. The total number of dispositioned applications for 2018 is about 7% lower than the total for 2017, mainly attributed to the South Coast AQMD's Permit Application Backlog Reduction efforts that peaked in 2017. This data, broken down into nine different categories, is summarized in Table 1 on page 35.

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, 445110 – Supermarkets and Other Grocery (except for Convenience) Stores, 447190 – Other Gasoline Stations, and 611110 – Elementary and Secondary Schools.

Emission Offset Transactions Data – Fiscal Year 2017/2018

During fiscal year 2017-18, a total of 84 emission offset transactions were completed, which include 52 transactions for reactive organic gases (ROG), 5 transactions for oxides of nitrogen (NOx), 1 transaction for oxides of sulfur (SOx), 3 transactions for carbon monoxide (CO), and 23 transactions for particulate matter with an aerodynamic diameter less than 10 microns (PM10). The amount of emissions offsets transferred, by pollutant, include 793 pounds per day of ROG, 69 pounds per day of NOx, 4 pounds per day of SOx, 82 pounds per day of CO, and 90 pounds per day of PM10 (see Table 3). There were 3 banking applications (1 for ROG and 2 for PM10) completed resulting in the issuance of new Short Term Emission Reduction Credits (STERCs) for a total of 37 pounds per day of ROG and 17 pounds per day of PM10. No applications were denied permits for new or modified sources due to unavailability of emission offsets. (See 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 achieved under the traditional command-and-control approach, while lowering the cost of compliance. To ensure RECLAIM is achieving its goal, South Coast AQMD 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-fourth 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 Chapter V), a total of 258 facilities were in the RECLAIM program at the end of Compliance Year 2017. Total NOx emissions from RECLAIM facilities were 19% less than the aggregate NOx allocations, and SOx emissions were 17% less than the aggregate SOx allocations for the program. The vast majority of RECLAIM facilities complied with their allocations during the 2017 compliance year (95% of NOx facilities and 90% of SOx facilities).

A total of over \$1.48 billion in RTCs has been traded since the adoption of RECLAIM, of which \$3.9 million occurred in CY 2018 (compared to \$6.9 million in CY 2017), 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 2017 and 2018 were all below the applicable thresholds for initiating program review.

In Compliance Year 2017, RECLAIM facilities reported a net loss of 276 jobs, representing 0.26% 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 "Annual RECLAIM Audit Report for 2017 Compliance Year."

Budget and Work Program

Refer to Chapter III for the Fiscal Year 2019-2020 Budget Report.

Clean Fuels Program

2018 Annual Report

In CY 2018, the following were executed under the South Coast AQMD Clean Fuels Program: 74 new contracts, projects or studies and modification of one continuing project adding dollars toward research, development, demonstration and deployment (RD3) projects as well as technology assessment and transfer of alternative fuel and clean fuel technologies.

The South Coast AQMD Clean Fuels Program contributed nearly \$27 million in partnership with other governmental organizations, private industry, academia and research institutes, and interested parties, with total project costs of more than \$85 million. The \$27 million includes \$12.3 million recognized into the Clean Fuels Fund as pass-through funds from project partners to facilitate project administration by the Clean Fuels Program. This \$12.3 million, which is about double the typical amount recognized into Clean Fuels on an average year, included \$3.1 million from a U.S. EPA Airshed Grant for near-zero CNG school buses, with the remaining incoming revenue from a U.S. EPA DERA Grant, CEC and the Ports as stakeholder partners. Additionally, in CY 2018, the Clean Fuels Program continued to leverage other outside funding opportunities, securing new awards totaling \$54.5 million from federal, state and local funding opportunities. Similar to the last couple of years, the significant project scope of a few key contracts executed in 2018 resulted in higher than average leveraging of Clean Fuels dollars. Typical leveraging is \$3-\$4 for every \$1 in Clean Fuels funding. In 2017, leveraging was more than \$1:\$6; in 2018, South Coast AQMD continued this upward trend with nearly \$6 leveraged for every \$1 in Clean Fuels funds. Leveraging dollars and aggressively pursuing funding opportunities are more important than ever given the magnitude of needed funding identified in the 2016 AQMP to achieve federal ozone air quality standards.

The projects or studies executed in 2018 included a diverse mix of advanced technologies. The following core areas of technology advancement for 2018 executed contracts (in order of funding percentage) include:

- 1. Electric and Hybrid Vehicle Technologies and Related Infrastructure (emphasizing electric and hybrid electric trucks developed by OEMs and container transport technologies with zero emission operations);
- 2. Engine Systems/Technologies (emphasizing alternative and renewable fuels for truck and rail applications);
- 3. Fueling Infrastructure and Deployment (predominantly natural gas and renewable fuels);
- 4. Technology Assessment and Transfer/Outreach;
- 5. Fuel/Emissions Studies;
- 6. Hydrogen and Mobile Fuel Cell Technologies and Infrastructure; and
- 7. Emissions Control Technologies.

During CY 2018, the South Coast AQMD supported a variety of projects and technologies, ranging from near-term to long-term RD3 activities. This "technology portfolio" strategy provides the South Coast AQMD the ability and flexibility to leverage state and federal funding while also addressing the specific needs of the Basin. Projects included significant electric and hybrid electric technologies and infrastructure to develop and demonstrate medium- and heavy-duty vehicles in support of transitioning to a near-zero and zero emissions goods movement industry; development, demonstration and deployment of large displacement natural gas and ultra-low emissions engines; and demonstration of emissions control technologies for heavy-duty engines; and natural gas and renewable natural gas deployment and support.

In addition to the 75 executed contracts and projects, 21 RD3 projects or studies and 24 technology assessment and transfer contracts were completed in 2018. As of January 1, 2019, there were 106 open contracts in the Clean Fuels Program.

In accordance with California Health & Safe Code Section 40448.5.1(d), the Clean Fuels Program annual report was submitted to the state legislature by March 31, 2019, after it was approved by the South Coast AQMD Governing Board.

2019 Plan Update

Every year, staff re-evaluates the Clean Fuels Program to develop a Plan Update based on a reassessment of the technology progress and direction for the agency. The Program continually seeks to support the development and deployment of lower-emitting technologies with an increasing collaboration with OEMs. The design and implementation of the Program Plan must balance the needs in the various technology sectors with technology readiness, emissions reduction potential and cofunding opportunities. As the state continues to focus a great deal of its attention to climate change and petroleum reduction goals, the South Coast AQMD has necessarily remained committed to developing, demonstrating and commercializing technologies that reduce criteria pollutants, specifically NOx and toxic air contaminants (TACs). Fortunately, many, if not the majority, of these technologies that address the Basin's need for NOx and TAC reductions also garner reductions in greenhouse gases (GHG) and petroleum use. Due to these "co-benefits," the South Coast AQMD has been successful in partnering with the state, which allows the Clean Fuels Program to leverage its funding extensively.

To identify technology and project opportunities where funding can make a significant difference in deploying progressively cleaner technologies in the Basin, the South Coast AQMD employs a number of outreach and networking activities. These activities range from close involvement with state and federal collaboratives, partnerships and industrial coalitions, to the issuance of Program Opportunity Notices to solicit project ideas and concepts as well as issuance of Requests for Information (RFIs) to determine the state of various technologies and the development and commercialization challenges faced by those technologies. Potential development, demonstration and certification projects resulting from these outreach and networking activities are included conceptually within the Draft 2019 Plan Update.

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 emissions control needs identified in the 2016 AQMP. Given the need for significant reductions over the next five to ten years, near-zero and zero emissions 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 zero emissions drayage trucks;
- developing and demonstrating ultra-low emissions liquid fuel larger displacement engines and zero emissions heavy-duty vehicles;
- developing, demonstrating and deploying advanced (increased efficiency) natural gas engines and vehicles as well as near-zero and zero emissions technologies for high
- horsepower applications;
- mitigating criteria pollutant increases from renewable fuels, such as renewable natural gas, diesel and hydrogen as well as other renewable fuels and waste streams;
- producing transportation fuels and energy from renewable and waste stream sources;
- developing and demonstrating electric-drive (fuel cell, battery, plug-in hybrid and hybrid) technologies across light-, medium- and heavy-duty platforms; and
- establishing large-scale hydrogen refueling and EV charging infrastructures to help accelerate the introduction of zero emissions vehicles into the market.

These potential projects for 2019 total \$16.9 million, with anticipated leveraging of more than \$4 for every \$1 of Clean Fuels funding for total project costs of \$73.7 million. Some of the proposed projects may also be funded by revenue sources other than the Clean Fuels Program, especially VOC and NOx mitigation and incentive projects.

CHAPTER I RULE DEVELOPMENT, CEQA, and SOCIOECONOMIC IMPACT ANALYSES

RULE ADOPTIONS AND AMENDMENTS IN 2018 AND CEQA ALTERNATIVES

This section contains a summary of each major rule adoption or amendment adopted by the South Coast AQMD Governing Board in the preceding CY (e.g., 2018). Each summary provides 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 South Coast AQMD must be reviewed to determine if they are considered to be a "project" as defined by CEQA. For any proposal that is either not a "project" or 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 being adopted, or existing rules being amended or rescinded typically 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 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. However, if the CEQA document concludes that no significant adverse environmental impacts would be generated by a proposed project, neither the identification of feasible mitigation measures nor an analysis of CEQA alternatives to the project is required. However, even if a project is determined not to have significant environmental impacts, the CEQA document will contain a focused analysis of the potential environmental impacts.

South Coast AQMD operates under a regulatory program certified by the Secretary for Resources pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l). The adoption, amendment or rescission of South Coast AQMD rules and regulations are subject to South Coast AQMD's certified CEQA program, while the adoption, amendment or rescission of plans such as the AQMP are not. Having a certified regulatory program means that the South Coast AQMD can incorporate its environmental analyses into CEQA documents other than environmental impact reports (EIRs), negative declarations (NDs), or mitigated NDs (MNDs) without being subject to a limited number of specific CEQA requirements identified in Public Resources Code Section 21080.5. Instead, all CEQA documents prepared by South Coast AQMD pursuant to its certified regulatory program are either called an Environmental Assessment (EA), or some variant of an EA such as a Subsequent or Supplemental EA, or Addendum to an EA.

The following section identifies all new and amended rules that were adopted by the Governing Board in 2018, in sequential order by the month projects were approved. No rules were rescinded in 2018. The type of CEQA document (including projects that were determined to be exempt from CEQA) is described for each new rule or rule amendment project. Alternatives are summarized only for those projects identified as having potentially significant impacts requiring an alternatives analysis pursuant to CEQA.

JANUARY 5, 2018

Three rules were amended in January, as follows:

1. Amended Rule 301 – Permitting and Associated Fees: Rule 301was amended to restore South Coast AQMD's authority to charge a fee for preparing and distributing a notice for any project requiring notification in accordance with Rule 212 (c); this fee was inadvertently deleted during the June 2, 2017 amendments. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule, and CEQA Guidelines Section 15273 - Rates, Tolls, Fares, and Charges. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: None, not required. Source(s) of Funding: Permit Fees, Emission Fees, and Annual Operating Fees.

2. Amended Rule 2001 – Applicability and Amended Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx): Rules 2001 and 2002 were amended to initiate the transition of facilities that are currently in the Regional Clean Air Incentives Market (RECLAIM) program to a command-and-control regulatory structure. Rule 2001 was amended so that no additional facilities can enter RECLAIM. Rule 2002 was amended to add procedures for notifying facilities transitioning out of the NOx RECLAIM program and provisions for handling RECLAIM Trading Credits (RTCs) during the transition period. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: Yes, see Socioeconomic Impact Assessments section. Source(s) of Funding: Permit Fees, Emission Fees, and Annual Operating Fees.

FEBRUARY 2, 2018

BACT Guidelines were amended in February, as follows:

1. Amended BACT Guidelines: BACT Guidelines were amended to reflect the most current achieved-in-practice air pollution control equipment and/or processes. The following new major source categories were added to Part B, Section 1 - South Coast AQMD Lowest Achievable Emissions Rate (LAER): 1) Food Ovens (Bakery with Catalytic Oxidizer add-on control, Tortilla Chip, and Snack Food); 2) Furnace, Heat Treating Aluminum (≤ 900 degrees Fahrenheit); and 3) Flares (Biogas rated at 12 million British Thermal Units per hour (MMBTU/hr) and 39.3 MMBTU/hr, and Landfill Gas rated at 120 MMBTU/hr). Updates to the following major source categories were added to Part B, Section 1 – South Coast AOMD LAER: 1) Boiler rated at 39.9 MMBTU/hr with selective catalytic reduction (SCR); and 2) Internal Combustion (I.C.) Engine - Digester Gas-Fired rated at 3,471 brake horsepower (hp) and 2,500 kilowatts with digester gas cleanup, oxidation catalyst, and SCR. Part B, Section III - Other Technologies, was updated for the following categories of emerging technologies in operation with an air quality permit that are not yet qualified as LAER: 1) I.C. Engine, Stationary, Emergency, Electrical Generator rated at 1 megawatt with a particulate matter trap and SCR; and 2) Fuel Cell Electricity Generator - Digester Gas fueled, electrical power generation with digester gas cleanup rated at 1.4 megawatts. Part D – Minor Source BACT was updated for the following categories: 1) Printing, Graphic Arts (Flexographic, Lithographic or Offset, Heatset, and Screen Printing and Drying); 2) Dryer or Oven; 3) I.C. Engine, Stationary, Non-Emergency, Non-Electrical Generators; 4) I.C. Engine, Portable (Tier 4 Final, rated between 75 hp and 175 hp). In addition, the following new minor source categories were added to Part D: 1) Food Oven - Ribbon, Direct-fired and Infrared Burners, Other Burners and Add-on control for bakery oven; and 2) I.C. Engine, Stationary, Non-Emergency, Electrical Generators. The category of I.C. Engine, Stationary, Non-Emergency was deleted from Part D. Lastly, an equipment category search web link was proposed to make the BACT Guidelines user friendly. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. Since the project was determined to be exempt from CEQA, no alternatives analysis was required. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: None, not required. Source(s) of Funding: Permit Fees, Emission Fees and Annual Operating Fees.

MARCH 2, 2018

One rule was amended in March, as follows:

1. Amended Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces; and Recognize Revenue: Rule 1111 was amended to increase the mitigation fee and extend the mitigation fee alternative compliance option to allow additional time for manufacturers to develop and commercialize a range of natural-gas-fired fan-type

furnaces that meet the NOx emission limit of 14 nanograms per Joule (ng/J). Rule 1111 was also amended to provide an exemption of rule applicability for natural gas furnaces installed with propane conversion kits for propane firing only, with a defined labeling requirement. A Final Subsequent Environmental Assessment (SEA) was prepared for the project and the analysis concluded that the project would have significant unavoidable air quality impacts during operation because the quantity of emission reductions foregone would exceed the South Coast AQMD's significance operational threshold for NOx. Because the Final SEA concluded that the project would have a significant adverse operational air quality impact on the environment, mitigation measures were required. However, because no feasible mitigation measures were identified that would eliminate or reduce the significant adverse operational air quality impacts for NOx emissions to less than significant levels, mitigation measures were not made a condition of approval of this project. Thus, a Mitigation Monitoring and Reporting Plan, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, was not required or adopted for this project. Findings were made pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 was adopted for this project. Since significant adverse environmental impacts were identified, an alternatives analysis was required by CEQA and prepared that include the following alternatives:

Alternative A – No Project: Alternative A, the no project alternative, means that the version of Rule 1111 that was amended in September 2014 would remain in effect. Under the September 2014 version of Rule 1111, condensing, non-condensing, weatherized, and mobile home units would have to comply with the applicable NOx emission limits from 2018 to 2022. Compliance with these NOx emission limits would result in NOx emission reductions occurring from 2018 through 2022. Under this alternative, however, suppliers indicated that they could not provide equipment that meets the applicable NOx emission limits, which in turn, created potential compliance issues for the manufacturers, distributors and installers. Under the No Project alternative, the originally projected NOx emission reductions in the September 2014 version of Rule 1111 would not have been able to be achieved if the September 2014 version of Rule 1111 remained in effect.

Alternative B – More Stringent NOx Emission Limit Alternative (10 ng/J NOx Emission Limit): Under Alternative B, the NOx emission limit of 10 ng/J is more stringent than the 14 ng/J NOx emission limit that was adopted in the March 2018 version of Rule 1111 (the proposed project). Under Alternative B, condensing, non-Condensing, weatherized, and mobile home units would have to comply with the NOx emission limit starting in 2018. The compliance dates for achieving the more stringent NOx emission limit under Alternative B would be equivalent to the compliance dates in the March 2018 version of Rule 1111 (the proposed project). Recovery of the NOx emission reductions foregone were expected to occur starting in 2018 as older equipment gets replaced or retrofitted over time. When compared to the March 2018 version of Rule 1111 (the proposed project), the NOx emission reductions foregone were expected to be recovered more quickly each year from compliance year 2018 to 2022 under Alternative B.

Alternative C – Less Stringent Timing Alternative (Three Year Extension for Compliance Dates): Under Alternative C, the NOx emission limit would remain the same as the March 2018 version of Rule 1111 (the proposed project). However, under

Alternative C, the compliance dates for all equipment types would be extended by three years from the September 2014 version of Rule 1111, which is less stringent than the compliance date extension that was adopted in the March 2018 version of Rule 1111 (the proposed project). Condensing, non-condensing, weatherized, and mobile home units were expected to comply with applicable NOx emission limits over the applicable extended compliance period of three years starting in 2018. Recovery of the NOx emission reductions foregone were expected to occur starting in 2018 as older equipment gets replaced or retrofitted over time. Under Alternative C, the NOx emission reductions foregone were expected to be recovered each year from compliance year 2018 to 2024.

Alternative D – More Mitigation Alternative (Increased Mitigation Fees): Under Alternative D, the NOx emission limit would remain the same as the March 2018 version of Rule 1111 (the proposed project). However, under Alternative D, the mitigation fee for all equipment types would be increased to \$500 per unit, which is more stringent than the two-phase \$400 mitigation fee schedule that was adopted in the March 2018 version of Rule 1111 (the proposed project). Under Alternative D, condensing, non-condensing, weatherized, and mobile home units would still have to comply with the same applicable NOx emission limits set forth in the March 2018 version of Rule 1111 (the proposed project). Under Alternative D, the amount of NOx emission reductions foregone were expected to be equivalent to the March 2018 version of Rule 1111 (the proposed project) and would occur starting in 2018 as older equipment gets replaced or retrofitted over time. Under Alternative D, the NOx emission reductions foregone were expected to be recovered each year from compliance year 2018 to 2024.

The South Coast AQMD Governing Board certified the Final SEA and approved the project as proposed. A Notice of Decision was prepared pursuant to Public Resources Code Section 21080.5(d)(2)(E), CEQA Guidelines Sections 15252(b) and 15094(b), and South Coast AQMD Rule 110(f) and filed with the Office of the Secretary of Resources.

Estimated Emission Reductions: Foregone NOx emissions reductions of: 0.07 to 0.09 tons per day in 2018, 0.26 to 0.32 tons per day in 2023, and 0.26 to 0.32 tons per day in 2031. Even though the March 2018 version of Rule 1111 delayed a compliance date, the foregone NOx emission reductions were attributed to not meeting a previous compliance date in the September 2014 version of Rule 1111. However, the amendment did not cause any overall change to future year emissions. Full implementation of Rule 1111 is expected to occur in 2046. Cost-Effectiveness: None, not required since no additional requirements on manufacturers meeting the 14 ng/J NOx emission limit were imposed. However, a cost-effectiveness analysis was performed for the 2009 amendments to Rule 1111 when the 14 ng/J NOx emission limit was first introduced. CEQA Alternatives: Four alternatives were analyzed, see alternatives described above. Socioeconomic Impact: No impact, see Socioeconomic Impact Assessments section. Source(s) of Funding: Emission Fees and Annual Operating Fees.

APRIL 6, 2018

Two rules were amended in April, as follows:

1. Amended Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, and Amended Rule 219 – Equipment Not Requiring a Written **Permit Pursuant to Regulation II:** Rule 1178 was amended to provide storage tank operators with an additional option for controlling volatile organic compound (VOC) emissions from aboveground floating roof tanks and to make the rules consistent with the 2000 United States Environmental Protection Agency (U.S. EPA) Storage Tank Emission Reduction Partnership Program (STERPP) Agreement. Specifically, the amendments to Rule 1178: 1) allow the installation of a Flexible Enclosure System on a slotted guide pole of any internal, external, or domed floating roof tank provided that the applicable combination of components is used to replace a pole float and float wiper/seal; 2) clarify repair or replacement provisions; 3) clarify due dates for inspection reports and related documents; and 4) update inspection procedures and compliance report forms. Rule 219 was amended to exempt from permit certain installations of a Flexible Enclosure System that occur in accordance with the corresponding amendments made to Rule 1178 Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062 and filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: No impact, see Socioeconomic Impact Assessments section. Source(s) of Funding: Emission Fees and Annual Operating Fees.

MAY 4, 2018

One regulation and one rule were amended in May, as follows:

1. Amended Regulation III – Fees: Amendments to Regulation III rules (Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315) include the following: 1) pursuant to Rule 320, an increase of most fees by 3.4% consistent with the Consumer Price Index; 2) new fees which are necessary to meet the requirements of recently adopted rules and state mandates; and 3) new or increased fees which are necessary to provide more specific cost recovery for other regulatory actions taken by the agency. Other changes were made to Regulation III, which had no fee impact, but included clarifications, deletions, or corrections to existing rule language. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule, and CEQA Guidelines Section 15273 - Rates, Tolls, Fares, and Charges. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: Yes, see Socioeconomic Impact Assessments section. Source(s) of Funding: Permit Fees, Emission Fees, and Annual Operating Fees.

2. Amended Rule 408 – Circumvention: Rule 408 was amended to address specific circumstances where facilities may attempt to avoid compliance by prohibiting a facility from altering business operations or equipment to evade detection or conceal emissions during monitoring and testing, and by limiting the existing exemption for cases in which the only violation is an odor nuisance. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule, and CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062 and filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: None, not required. Source(s) of Funding: Emission Fees and Annual Operating Fees.

JUNE 1, 2018

No rules were adopted, amended, or rescinded in June.

JULY 6, 2018

One rule was amended in July, as follows:

1. Amended Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces: Rule 1111 was amended to add a new consumer notification requirement, effective October 1, 2018, that will be applicable to any furnace where a mitigation fee is paid that allows the unit to be sold or distributed inside the Basin in lieu of meeting the compliant NOx emission limit of 14 nanograms per Joule (ng/J). Amended Rule 1111 also requires manufacturers that distribute or publish informative materials, such as consumer brochures, technical specification sheets for the furnace, and the manufacturer's website promoting the non-compliant furnace, to clearly display specific language that the furnace does not meet the current emission limit, is subject to a mitigation fee, and is not eligible for the South Coast AQMD's rebate program. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062 and filed with the county Clerks of Los Angeles, Orange, Riverside, and San Bernardino counties.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: None, not required. Source(s) of Funding: Emission Fees and Annual Operating Fees.

AUGUST 2018

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

SEPTEMBER 7, 2018

No rules were adopted, amended, or rescinded in September.

OCTOBER 5, 2018

Two rules were amended in October, as follows:

1. Amended Rule 2001 – Applicability and Amended Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx): Rules 2001 and 2002 were amended to facilitate the transition of the NOx RECLAIM program to a command-and-control regulatory structure. Rule 2001 was amended to allow any facility to exit RECLAIM provided that it meets specific criteria. Rule 2002 was amended to allow facilities to remain in RECLAIM after the issuance of an initial determination notification for potential. RECLAIM facilities will be required to comply with Best Available Retrofit Control Technology (BARCT) requirements under any applicably adopted or amended command-and-control rule. The amendments to Rules 2001 and 2002 were administrative in nature and did not impose a new or more stringent emission limit or standard. A Final Subsequent Environmental Assessment (SEA) was prepared for the project and the analysis concluded that there would be no significant adverse environmental impacts for any environmental topic area. The South Coast AQMD Governing Board certified the Final SEA and approved the project as proposed. A Notice of Decision was prepared pursuant to Public Resources Code Section 21080.5(d)(2)(E), CEQA Guidelines Sections 15252(b) and 15094(b), and South Coast AQMD Rule 110(f) and filed with the Office of the Secretary of Resources.

Estimated Emission Reductions: None. Cost-Effectiveness: None, not required. CEQA Alternatives: None, not required. Socioeconomic Impact: No impact, see Socioeconomic Impact Assessment section. Source(s) of Funding: AB 617, Permit Fees, Annual Operating Fees, and Emission Fees.

NOVEMBER 2, 2018

One rule and one plan were amended in November, as follows:

1. Amended 1-Hour Ozone Standard Attainment Demonstration: In order to demonstrate attainment of the 1-hour ozone standard by 2022, the attainment demonstration of the federal 1979 1-hour ozone standard that was included in the 2016 AQMP was updated by: 1) making the emissions inventory consistent with final emissions inventory used for the attainment demonstrations of the 8-hour ozone and PM2.5 standards in the 2016 AQMP; 2) revising the air quality modeling; and 3) revising the attainment strategy for meeting the 1-hour ozone

standard by removing emission reductions from CARB's SIP strategies, including federal Clean Air Section 182(e)(5) measures ("black box" measures) since they are no longer needed to demonstrate attainment with the 1-hour ozone standard. Staff's analysis of the proposed amendments concluded that the project qualified for an exemption from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule, and CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. Projects that are exempt from CEQA do not require an alternatives analysis. As such, no alternatives analysis was prepared for this project. The South Coast AQMD Governing Board determined that the project was exempt from CEQA and approved the project as proposed. A Notice of Exemption was prepared pursuant to CEQA Guidelines Section 15062.

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

2. Amended Rule 1135 - Emissions of Oxides of Nitrogen from Electricity Generating Facilities: Rule 1135 was amended to reduce oxide of nitrogen emissions (NOx) emissions from RECLAIM and non-RECLAIM electricity generating facilities which are owned or operated by an investor-owned electric utility, a publicly owned electric utility, or have electric generating units with a combined generation capacity of 50 megawatts or more of electrical power for distribution in the state or local electrical grid system. The amendments to Rule 1135: 1) expanded the rule's applicability to include units at RECLAIM electricity generating facilities and units at electricity generating facilities that were not at electric power generating systems previously subject to Rule 1135; 2) updated the NOx and ammonia emission limits for boilers and gas turbines; 3) established NOx emission limits and added new emission limits for ammonia, carbon monoxide, volatile organic compounds, and particulate matter for internal combustion engines; 4) revised monitoring, reporting, and recordkeeping requirements; and 5) revised exemptions. The project is estimated to reduce NOx emissions by 1.7 tons per day by January 1, 2027 after implementation of the best available retrofit control technology (BARCT) limits. A Final Mitigated Subsequent Environmental Assessment (SEA) was prepared for the project and the analysis concluded that although a reduction of NOx emissions is expected to create an environmental benefit and protect public health, the activities that the affected facilities may undertake to ensure compliance with amended Rule 1135 may also create potentially significant adverse environmental impacts for the topic of hazards and hazardous materials due to the storage and use of aqueous ammonia. As such, mitigation measures were crafted that were shown to reduce the potentially significant adverse hazards and hazardous materials impacts to less than significant levels. No other environmental topic areas were identified as having potentially significant adverse environmental impacts. Thus, the Final Mitigated SEA concluded that amended Rule 1135 would not result in significant adverse impacts to any environmental topic areas, including the topic of hazards and hazardous materials after mitigation measures are applied. Mitigation measures were made a condition of project approval and a Mitigation, Monitoring, and Reporting Plan pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was prepared and adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEOA Guidelines Section 15093, were not required and therefore, not adopted for this

project. The South Coast AQMD Governing Board certified the Final Mitigated SEA and approved the project as proposed. A Notice of Decision was prepared pursuant to Public Resources Code Section 21080.5(d)(2)(E), CEQA Guidelines Sections 15252(b) and 15094(b), and South Coast AQMD Rule 110(f), and filed with the Office of the Secretary of Resources.

Estimated Emission Reductions: 1.7 tons per day of NOx after implementation of the BARCT limits (e.g., by January 1, 2027). Cost-Effectiveness: For diesel internal combustion engines, 0.1 tons per day of NOx emission reductions at an average cost-effectiveness of approximately \$23,000 per ton of NOx reduced. For natural gas boilers, 1.6 tons per day of NOx emission reductions at an average cost-effectiveness of approximately \$5,630 per ton of NOx reduced. CEQA Alternatives: None, not required. Socioeconomic Impact: Yes, see Socioeconomic Impact Assessments section. Source(s) of Funding: AB 617, Permit Fees, Emission Fees, and Annual Operating Fees.

3. Amended Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations: Rule 1469 was amended to further reduce hexavalent chromium emissions from chromium electroplating and chromic acid anodizing operations. Amended Rule 1469 incorporated new requirements for: 1) hexavalent chromiumcontaining tanks, such as dichromate seal tanks, that are currently not regulated; 2) air pollution control equipment to be installed on Tier III hexavalent chromium tanks that emit or have the potential to emit hexavalent chromium; 3) conducting periodic source testing and parametric monitoring of air pollution control equipment; 4) complying with building enclosure provisions; 5) conducting additional housekeeping and implementing best management practices for all hexavalent chromium containing tanks; 6) permanent total enclosures to be vented to air pollution control equipment in the event of non-compliance with specific source testing or monitoring requirements; 7) reducing allowable surface tension limits; 8) prohibiting the use of chemical fume suppressants that contain perfluorooctane sulfonic acid (PFOS); and 9) evaluating the use of non-PFOS chemical fume suppressants with toxicity concerns via a revised certification process conducted by South Coast AQMD and the California Air Resources Board. A Revised Final Environmental Assessment (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, an alternatives analysis and mitigation measures were not required by CEQA. Mitigation measures were not made a condition of project approval and a Mitigation, Monitoring, and Reporting Plan pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097 was not required or adopted for this project. Findings, pursuant to CEQA Guidelines Section 15091, and a Statement of Overriding Considerations, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15093, were not required and therefore, not adopted for this project. The South Coast AQMD Governing Board certified the Revised Final EA and approved the project as proposed. A Notice of Decision was prepared pursuant to Public Resources Code Section 21080.5(d)(2)(E), CEQA Guidelines Sections 15252(b) and 15094(b), and South Coast AQMD Rule 110(f) and filed with the Office of the Secretary of Resources.

Estimated Emission Reductions: Implementation of amended Rule 1469 will reduce the exposure to hexavalent chromium, a toxic air contaminant. Emission reductions of hexavalent chromium could not be quantified. Cost-Effectiveness: None, not required for proposed toxic air contaminants rules or rule amendments. CEQA Alternatives: None, not required.

Socioeconomic Impact: Yes, see Socioeconomic Impact Assessments section. Source(s) of Funding: Annual Operating Fees, and Emission Fees.

DECEMBER 7, 2018

Three rules were amended and one rule was adopted as one project in December, as follows:

1. Amended Rules 1146 - Emissions of Oxides of Nitrogen (NOx) from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; 1146.2 - Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters; and Adopted Rule 1100 – Implementation Schedule for NOx Facilities: Rules 1146, 1146.1, and 1146.2 were amended to achieve additional NOx emission reductions. Amendments were needed to transition facilities in the RECLAIM program to a command-and-control regulatory structure. Rule 1100 was adopted to establish the compliance schedule for RECLAIM facilities with Rule 1146 and/or 1146.1 units. Rules 1146 and 1146.1 updated the NOx emission limits for boilers, heaters, and steam generators. Rule 1146.2 removed the exemption for RECLAIM facilities with no changes to the NOx emission limits for larger water heaters and small boilers and process heaters. The NOx emission limits under Rules 1146, 1146.1, and 1146.2 represent BARCT and apply to RECLAIM and non-RECLAIM facilities. The amendments to Rules 1146 and 1146.1 also limited ammonia emissions for new or modified units with applicable air pollution control equipment and required quarterly ammonia source testing (if four consecutive quarterly source tests demonstrate compliance, an annual source test may be conducted), required certain units at non-RECLAIM facilities to meet new NOx emission limits, and allowed units at municipal sanitation service facilities to maintain existing NOx emission limits until a South Coast AQMD Regulation XI – Source Specific Standards rule is adopted or amended.

A Final Subsequent Environmental Assessment (SEA) was prepared for the project and the analysis concluded that although a reduction of NOx emissions are expected to create an environmental benefit and protect public health, the activities that the affected facilities may undertake to comply with the applicable NOx emission limits (e.g., installing selective catalytic reduction (SCR) systems for air pollution control purposes) may also create potentially significant adverse environmental impacts for the topic of hazards and hazardous materials due to the storage and use of aqueous ammonia needed for the operation of SCR systems. As such, mitigation measures were required and crafted to reduce the severity of the effects of the potentially significant adverse hazards and hazardous materials impacts and these mitigation measures were made a condition of approval of this project; however, the impacts could not be mitigated to less than significant levels. No other environmental topic areas were identified as having potentially significant adverse environmental impacts. Thus, a Mitigation, Monitoring, and Reporting Plan, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, was required and adopted for this project. Findings were made pursuant to CEQA Guidelines Section 15091. A Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 was adopted for this 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: Alternative A, the no project alternative, means that the current versions of Rules 1146 and 1146.1 that were amended in November 2013, and the current version of 1146.2 that was amended in April 2006, would remain in effect and affected facilities subject to these rules would not transition out of the NOx RECLAIM program. Under the November 2013 versions of Rules 1146 and 1146.1, units at RECLAIM facilities would not have to comply with the NOx emission limits presented in Tables 1146-1 and 1146.1-1, respectively. Under Alternative A, no NOx emission reductions will be achieved and the units subject to Rules 1146 and 1146.1 at RECLAIM facilities would not meet BARCT level equivalency. However, the December 2015 amendments to the NOx RECLAIM program evaluated BARCT level equivalency for combustion units that would have otherwise been subject to Rules 1146, 1146.1, and 1146.2 had they not been in the RECLAIM program. Furthermore, the environmental impacts for the December 2015 amendments to the NOx RECLAIM program were evaluated in the Final Program EA that was certified in December 2015¹. Under Alternative A, units subject to Rules 1146, 1146.1, and 1146.2 at RECLAIM facilities would not begin the transition to a command-and-control regulatory structure. In addition, under Alternative A, the implementation schedule contained in new Rule 1100 would also not take effect.

Alternative B - Compliance Deadline Extension: The requirements under Alternative B are equivalent to the proposed project, but the compliance deadline for meeting the NOx emission limits would be extended by one year for all units. At any facility, 75 percent of the units subject to Rules 1146 and 1146.1 would need to meet the applicable NOx emission limit by January 1, 2022 and 100 percent would need to achieve compliance by January 1, 2023. In addition, the facilities would have one additional year to submit permit applications. The extension of the compliance deadline for units subject to Rules 1146 and 1146.1 under Alternative B is less stringent than the proposed project.

Alternative C - 100% of Units by January 1, 2021: The NOx emission limits under Alternative C are the same as the proposed project, but facilities would need to achieve 100 percent compliance one year earlier than the proposed project, e.g., by January 1, 2021. The earlier compliance date would apply to 25 percent of the units subject to Rules 1146 and 1146.1. The earlier compliance date under Alternative C is more stringent than the proposed project.

Alternative D - All Ultra-Low NOx Burners: Under Alternative D, the NOx emission limit is less stringent for Group I (Rule 1146) units than the proposed project, but Alternative D has the same compliance deadline as the proposed project. Under Alternative D, the Group I units would need to meet a NOx emission limit of nine ppm (or 0.011 pound per MMBtu) instead of five ppm (or 0.0062 pound per MMBtu). The Group II and III units subject to Rule 1146 and fire-tube boilers rated between two and five MMBtu subject to Rule 1146.1 would need to meet a NOx emission limit of nine ppm (or 0.011 pound per MMBtu) instead of five ppm or seven ppm (or 0.00085 pound per MMBtu) as required by the proposed project. Under Alternative D, the NOx emission limit for thermal fluid heaters remains at 30 ppm (or 0.037 pound per MMBtu) instead of 12 ppm (0.015 pound per

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South Coast AQMD, Final Program Environmental Assessment for Proposed Amended Regulation XX - RECLAIM, November 2015. http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2015/regxxfinalpeaplusappendices.pdf

MMBtu) as required by the proposed project. Thus, under Alternative D, the thermal fluid heaters would not be able to meet BARCT NOx emissions equivalency. All other requirements in the proposed project are the same for Alternative D. Overall, Alternative D is less stringent than the proposed project.

Alternative E – NOx RECLAIM Facilities Transitioning to Command-and-Control Regulatory Structure at Current Limits: Under Alternative E, only NOx RECLAIM facilities would be affected instead of NOx sources at both non-RECLAIM and RECLAIM facilities under the proposed project. The NOx emission limits under Alternative E are less stringent than the proposed project for the following: 1) units with a rated heat input of greater than or equal to 20 and less than 75 MMBtu per hour (Group II); 2) units with a rated heat input of greater than or equal to two but less than 20 MMBtu per hour (Rules 1146 and 1146.1) for fire-tube boilers; and 3) thermal fluid heaters. Alternative E would require Group II and Group III units to meet a NOx emission limit of nine ppm (or 0.011 pounds per MMBtu) instead of the following NOx emission limits contained in the proposed project: 1) five ppm (or 0.0062 pound per MMBtu) for Group II units with an existing NOx emission limit greater than 12 ppm; 2) seven ppm (or 0.0085 pound per MMBtu) for Group II units that are fire-tube boilers with an existing NOx emission limit less than or equal to nine ppm greater than five ppm; and 3) seven ppm (or 0.0085 pound per MMBtu) for Group III units that are fire-tube boilers with an existing NOx emission limit less than or equal to 9 ppm prior to December 7, 2018.

In addition, under Alternative E, any units with a rated heat input greater than two but less than five MMBtu per hour would need to meet a NOx emission limit of nine ppm. In the proposed project, units with a rated heat input greater than two but less than five MMBtu per hour are required to meet a NOx emission limit of seven ppm for fire-tube boilers with an existing NOx emission limit less than or equal to nine ppm prior to December 7, 2018, and nine ppm for all others. In addition, under Alternative E, thermal fluid heaters would remain at the current NOx emission limit of 30 ppm (or 0.037 pound per MMBtu). All other requirements in the proposed project are the same for Alternative E. Overall, Alternative E is less stringent than the proposed project.

The South Coast AQMD Governing Board certified the Final Subsequent Environmental Assessment and approved the project as proposed. A Notice of Decision was prepared pursuant to Public Resources Code Section 21080.5(d)(2)(E), CEQA Guidelines Sections 15252(b) and 15094(b), and South Coast AQMD Rule 110(f) and filed with the Office of the Secretary of Resources.

Estimated Emission Reductions: 0.27 tons per day NOx by January 1, 2023. Cost-Effectiveness: \$26,500 per ton of NOx reduced. CEQA Alternatives: Five alternatives were analyzed, see alternatives described above. Socioeconomic Impact: Yes, see Socioeconomic Impact Assessments section. Sources of Funding: AB 617, Permit Fees, Emission Fees, and Annual Operating Fees.

CEQA LEAD AGENCY PROJECTS

South Coast AQMD also acts as the Lead Agency under CEQA for non-South Coast AQMD projects where South Coast AQMD 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 South Coast AQMD for permit projects are subject to the standard CEQA requirements. South Coast AQMD staff is responsible for preparing or reviewing prepared CEQA documents for stationary source permit projects.

In 2018, one lead agency project with corresponding CEQA documents were approved by the South Coast AQMD's Executive Officer, as summarized below.

Addendum to the April 2007 Final Mitigated Negative Declaration for Southern California Edison: Barre Peaker Project, Stanton (project approved October 30, 2018): Southern California Edison operators proposed additional changes to their project that was previously evaluated and adopted in the Final Mitigated Negative Declaration (MND) for the Southern California Edison Barre Peaker Project in Stanton, CA on April 3, 2007, herein referred to as the April 2007 Final MND. The project evaluated in the April 2007 Final MND was for the installation of a General Electric natural gas-fired turbine generator, also referred to as a "peaker" unit, plus an air pollution control system comprised of a selective catalytic reduction (SCR) unit and oxidation catalyst to reduce emissions to levels that meet all applicable local air quality emission standards. The peaker is capable of producing up to 45 MW of electricity on short notice during periods when the local electrical system needs power and local voltage support.

Subsequent to the adoption of the April 2007 Final MND, SCE operators proposed to modify the peaker's turbine air pollution control system to: 1) decrease the water-injection rate into the turbine's combustor by up to 54 percent; 2) replace the SCR catalyst and increase the crosssectional area (by nearly three times) and the pitch (i.e., angle) of the SCR catalyst beds to maximize the contact area and time the turbine's exhaust gas moves across the catalyst, without increasing the size (outside dimensions) of the SCR enclosure; 3) replace the oxidation catalyst with an updated design and higher conversion rate, which provides functionally equivalent emissions control; 4) modify the exhaust flow distribution design and ammonia injection grid design to improve the deliverability of ammonia to the catalyst; and; 5) increase the concentration of aqueous ammonia delivered to the facility, stored on-site, and injected into the SCR from 19 percent to 29 percent. In addition, to increase the operating flexibility of the peaker so that it can provide reliable power to the grid when dispatched by the California Independent System Operator (CAISO) during peak times when renewable energy resources are not available, SCE is proposing to revise its South Coast AQMD Title V Operating Permit to allow the turbine to generate power over its full operating range, from less than one megawatt (MW) to full load, while continuing to meet the emission limits in the current permit without increasing: 1) utilization of the Barre Peaker for power generation; 2) fuel-input limits, generation capacity, or the heat rate of the turbine; and, 3) The potential to emit of criteria pollutants, greenhouse gases, or toxic air contaminants (TACs).

The Addendum to the April 2007 MND concluded that the proposed modifications to the original project previously analyzed in the April 2007 Final MND would not create any new significant adverse environmental impacts or substantially increase the severity of the significant effects previously identified. The mitigation measures that were made a condition of approval of the original project analyzed in the April 2007 Final MND and the corresponding Mitigation, Monitoring, and Reporting Plan that was adopted at that time will remain in effect. No new or modified mitigation measures were made as a condition of the approval of this project. Since there were no significant impacts that could not be mitigated to less than significant levels in the April 2007 MND and there are no new significant impacts in the Addendum to the April 2007 MND, no alternatives analysis is required under CEQA. Findings were not made and a Statement of Overriding Considerations was not required or adopted for the original project analyzed in the March 2007 Final MND since no significant adverse impacts were identified that could not be mitigated to less than significant levels. Further, because there are no new significant impacts as a result of the amended project analyzed in the Addendum to the April 2007 MND, neither Findings nor a Statement of Overriding Considerations are required.

SOCIOECONOMIC IMPACT ANALYSES

California Health and Safety Code Section 40440.8 requires that South Coast AQMD perform socioeconomic impact assessments for its rules and regulations that will significantly affect air quality or emissions. Prior to the requirements of Section 40440.8, South Coast AQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 resolution of its Governing Board. Additionally, South Coast AQMD 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 AQMPs. Additionally, South Coast AQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of South Coast AQMD rules on Los Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to employment and competitiveness.

There were eleven rule projects in 2018 which included adoption of one new rule and amendments to twelve rules and one regulation. There were two additional projects to update BACT Guidelines and the 1-hour ozone standard attainment demonstration. Out of the 13 projects, four had socioeconomic impacts. Additionally, one rule, Rule 320, did not undergo any amendments that were brought to the South Coast AQMD 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.

Rule Adoptions and Amendments with Socioeconomic Impacts

<u>Amended Rule 2001 – Applicability, and Amended Rule 2002 – Allocations for Oxides Of Nitrogen (NOx) and Oxides of Sulfur (SOx) (January 5, 2018)</u>

Rules 2001 and 2002 were amended to initiate the transition of facilities that are currently in the Regional Clean Air Incentives Market (RECLAIM) program to a command-and-control regulatory structure. The socioeconomic analysis identified 266 potentially affected facilities in the NOx RECLAIM program as of November 2017. None of these facilities were identified as being affected by amended Rule 2001, while 38 facilities would be affected initially by amended Rule 2002. All 38 affected facilities were already compliant with BARCT limits and therefore, would not incur increased compliance costs as a result of amended Rule 2002. If these facilities were to remain in the NOx RECLAIM program, three facilities would hold an estimated 0.027 tons per day surplus of NOx RECLAIM trading credits (RTCs) valued at an estimated \$62,000 per compliance year available for future sale or transfer. In addition, 19 other facilities would have insufficient RTCs for future compliance needs, approximately 0.110 tons per day, resulting in an approximate \$254,000 cost savings per compliance year. Staff concluded that the potential impact of amended Rule 2002 on demand and supply of the NOx RTC market would be minimal, and large RTC price fluctuations were unlikely to occur as a result of the exit of these facilities out of the NOx RECLAIM program. Therefore, it was concluded that amended Rule 2002 would have minimal impacts on existing facilities that are not yet ready to exit the NOx RECLAIM program. The minimal cost impacts would result in minimal job impacts in the regional economy.

<u>Amended Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing (November 2, 2018)</u>

Rule 1469 was amended to protect public health by minimizing exposure to hexavalent chromium emissions. Amended Rule 1469 requires the following: 1) installation of air pollution control equipment on hexavalent chromium containing tanks that emit or have the potential to emit hexavalent chromium that are currently not regulated; 2) periodic source testing and parametric monitoring of air pollution control equipment; 3) building enclosures with openings that do not exceed three and a half percent of the building envelope; 4) conditional criteria for installing Permanent Total Enclosures (PTE); 5) implementation of Best Management Practices (BMP) for all hexavalent chromium containing operations; and 6) re-certification of non-PFOS chemical fume suppressants due to potential toxicity concerns via an enhanced certification process conducted by South Coast AQMD and CARB. Amended Rule 1469 also prohibits the use of chemical fume suppressants that contain PFOS.

South Coast AQMD conducted a facility-based impact analysis in order to provide further information on the potential impacts of the proposed amendments to Rule 1469 for small businesses. This analysis measures the annual compliance cost a facility may incur under the proposed amendments relative to its annual revenues. Staff identified 115 facilities that either conduct decorative or hard chromium electroplating or chromic acid anodizing operations within South Coast AQMD's jurisdiction. The majority of the compliance costs, which range from \$2.64 million (low cost scenario) to \$4.30 (high cost scenario), is associated with the capital, installation, and operation and maintenance of air pollution control systems that are expected to be installed in order to comply with the rule's requirements. For 27 facilities that currently use chemical fume suppressants as the only method of air pollution control, a certified non-PFOS chemical fume

suppressant is expected to be available by 2021 which may be a lower cost compliance option because its use would allow a facility to forego the installation of an air pollution control system.

South Coast AQMD does not conduct a dollar per ton cost-effectiveness for risk-based rules which regulate toxic air contaminants (TACs) since other factors such as toxic potency, the location of receptors and the amount of air pollution can affect risk. Since Rule 1469 regulates a TAC, hexavalent chromium, a cost-effectiveness analysis is not required, and thus, was not conducted for this amendment.

Amended Rule 1469 is expected to result in 37 to 63 jobs foregone annually, on average, between 2019 and 2035 as a result of the compliance costs associated with the purchase, installation, and operation of air pollution control systems and the implementation of best management practices. The projected jobs loss impacts represent about 0.001% of the total employment in the four-county region.

<u>Amended Rule 1135 – Emissions of Oxides of Nitrogen from Electricity Generating Facilities</u> (November 2, 2018)

Rule 1135 was amended to reduce NOx emissions from electricity generating facilities (EGF). Rule 1135 was the first command-and-control rule to be amended as part of the transition from the NOx RECLAIM program to a command-and-control regulatory structure. Amended Rule 1135 applies to RECLAIM and non-RECLAIM electricity generating facilities that own and operate electricity generating units (e.g., boilers, gas turbines with the exception of cogeneration turbines, and internal combustion engines on Santa Catalina Island) and are investor-owned electric utilities, publicly owned electric utilities, or have a generation capacity of at least 50 megawatts (MW) of electrical power. Amended Rule 1135 updates the NOx emission limits to reflect current Best Available Retrofit Control Technology (BARCT) according to required implementation timeframes.

Amended Rule 1135 establishes NOx and ammonia (NH3) emission limits for boilers and gas turbines and emission limits for NOx, NH3, carbon monoxide, volatile organic compounds, and particulate matter for internal combustion engines with the exception of emergency internal combustion engines. Additionally, amended Rule 1135 establishes additional requirements to conduct monitoring, reporting, and recordkeeping, and exemptions from specific provisions. The Final Socioeconomic Impact Assessment for amended Rule 1135 was conducted based on an original NOx emission reduction estimate of 1.9 tons per day by January 1, 2027, which did not include changes made to the Final Staff Report for Amended Rule 1135 which reflected an adjusted NOx emission reduction estimate to 1.7 tons per day. This discrepancy did not affect the cost-effectiveness calculations, as these were performed in the Final Staff Report.

There are 31 electricity generating facilities subject to amended Rule 1135. The electricity generating units at 28 of these facilities are not expected to require modifications to comply with amended Rule 1135 because the each electricity generating unit either: 1) currently meets the applicable revised NOx emission limit; 2) currently qualifies for an exemption from having to comply with the revised NOx emission limit because of the low-use provision; 3) has an existing, permitted NOx emission limit that is near the revised NOx emission limit such that the unit may qualify for an exemption from having to comply with the revised NOx emission limit because the

cost of potential equipment modifications would exceed a cost-effectiveness threshold of \$50,000 per ton of NOx reduced; or 4) is scheduled by facility operators to be either shut down or repowered due to other regulatory requirements not pertaining to amended Rule 1135.

The average annual compliance cost is expected to range from \$7.4 million to \$10.0 million depending on the real interest rate assumed (1% to 4%). The majority of the costs can be attributed to the installation of three natural gas turbines at a single facility, with a projected cost of \$7.2 million. Additional costs of SCR replacement, installation of five diesel internal combustion engines, and application fees for making permit modifications account for the remainder of the compliance costs that may be associated with amended Rule 1135.

The projected impact on employment is estimated to result in 104 to 154 jobs forgone, on average annually between 2019 and 2045. The projected job loss impacts represent 0.0009% to 0.0014% of total employment in the four-county region.

Amended Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; Amended Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; Amended Rule 1146.2 - Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters; and Adopted Rule 1100 - Implementation Schedule for NOx Facilities (December 7, 2018)

The amendments to Rules 1146, 1146.1 and 1146.2, referred to herein as the Rule 1146 series, were developed to continue the ongoing transition of equipment from the NOx RECLAIM program to a command-and-control regulatory structure while achieving Best Available Retrofit Control Technology (BARCT) to achieve NOx reductions. NOx reductions are expected to be achieved through BARCT retrofits using selective catalytic reduction (SCR) and ultra-low NOx burners (ULNB) in order to comply with the applicable NOx emission limits in the Rule 1146 series. In addition, South Coast AQMD staff has adopted new Rule 1100, an administrative rule, to establish the compliance schedule for facilities exiting the RECLAIM program.

In order to meet the applicable NOx emission limits, amended Rule 1146 may result in: 1) two facilities with Group I units to retrofit for three SCR units at an average cost of \$1.4 million (including installation and permitting for each unit), 2) 30 facilities with 52 Group II units to retrofit SCRs at an average cost of \$565,000 per unit; and 3) 36 facilities with 67 Group III units to install ULNBs at an average cost of \$134,000.

There are 824 non-RECLAIM facilities operating an estimated 1,075 non-RECLAIM units that are subject to amended Rule 1146. Further, there are 732 non-RECLAIM units subject to amended Rule 1146.1. With the exception of non-RECLAIM units using thermal fluid heaters, Group II and Group III units subject to amended Rule 1146 and all units subject to amended Rule 1146.1 are not required to meet the applicable NOx emission limits until either the burner is replaced or 15 years after rule adoption.

The average annual compliance cost associated with the Rule 1146 series is estimated at \$5.6 million to \$6.8 million between 2020 and 2045, depending on real interest rate assumed (1% to 4%). The majority of the costs are associated with the purchase and installation of SCR and ULNB

retrofits, and are estimated at an average annual cost of \$4.1 to \$5.4 million. Amended Rule 1146 Group II incurs the largest annual compliance cost due to the capital and recurring costs associated with SCRs.

An average of 57 to 72 jobs are estimated to be foregone annually between 2020 and 2045 as a result of the Rule 1146 series. This projected loss represents about 0.0021% of the total employment in the four-county region.

Rule Amendments without Socioeconomic Impacts

Amended Rule 301 – Permitting and Associated Fees (January 5, 2018)

In the amendments to Regulation III that were previously adopted in 2017, staff had inadvertently deleted the South Coast AQMD's authority to charge for the preparation of a notice for a project requiring notification as defined in Rule 212 (c). To restore South Coast AQMD's previously deleted authority, administrative changes were made to Rule 301. The administrative changes were concluded to not have no impacts to air quality or emission limitations such that adverse socioeconomic impacts would not be expected to occur and therefore, a socioeconomic impact assessment was not required.

Amended Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, and Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II (April 6, 2018)

Amended Rule 1178 clarifies rule requirements and provides additional regulatory flexibility. Specifically, the amendments allow facilities to replace a pole float and float wiper/seal with a Flexible Enclosure System, which completely encloses the slotted guide-pole in floating roof tanks. The cost of installing a Flexible Enclosure System for a 48-foot tall tank is estimated at \$5,500 with an additional cost of \$2,200 for an optional transition box. Because the use of a Flexible Enclosure System is completely voluntary, no adverse socioeconomic impacts are expected to occur. Amended Rule 219 provides cost savings to affected facilities by not requiring permits for slotted guide-pole Flexible Enclosure Systems.

Amended Rule 408 – Circumvention (May 4, 2018)

Amended Rule 408 clarifies the rule language and makes several revisions that are administrative in nature without imposing any additional costs to facilities or result in other socioeconomic impacts. Implementation of amended Rule 408 provides greater assurance that monitored air emissions are more representative of actual conditions by prohibiting alteration of normal operations or equipment to suppress emissions. Since amended Rule 408 does not require the installation of air pollution control equipment, require material formulations or process changes, or establish an emission limit or standard, the analysis concluded that the changes would not significantly affect air quality or emission limitations. Therefore, no socioeconomic impact assessment was required or conducted pursuant to Health and Safety Code Sections 40440.8 and 40728.5.

<u>Amended Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces (March 2, 2018 and July 6, 2018)</u>

Rule 1111 was amended twice in 2018, and the provisions affected manufacturers of gas-fired fantype furnaces. At the March 2, 2018 Public Hearing which adopted amendments to Rule 1111 that reduced the NOx emission limits from natural-gas-fired fan-type furnaces, the Governing Board directed staff to develop additional labeling requirements. None of the furnace manufacturers are located within the four-county jurisdiction of South Coast AQMD, but potential downstream businesses, such as wholesalers, retailers, and contractors who install or repair these furnaces, could be affected by the March 2018 amendments. Under the March 2018 version of amended Rule 1111, an extended alternative compliance option is allowed if a mitigation fee is paid, and the original equipment manufacturers (OEM) would benefit from the rebate program that could lower the overall price of their product and increase demand. Therefore, staff determined that no adverse socioeconomic impacts would result from the reducing NOx emissions in accordance with the March 2018 version of amended Rule 1111.

In response to Governing Board direction at the March 2, 2018 Public Hearing, the July 6, 2018 amendments to Rule 1111 added consumer notification requirements for informational materials, including marketing brochures, technical specification sheets, and manufacturers' websites, for furnaces that are not certified to meet the 14 ng/J NOx emission limit and are participating in the alternate compliance option. The July 2018 amendments to Rule 1111 were concluded to be administrative in nature. Further, because the cost impacts to manufacturers were expected to be minimal, no significant adverse socioeconomic impacts were expected to result. Further, the July 2018 amendments to Rule 1111 do not require manufacturers to generate additional brochures or specification sheets. Instead, the necessary information is required to be added to brochures, technical specification sheets, and each manufacturer's website(s), which are already created, maintained, and distributed. In addition, the analysis concluded that the July 2018 amendments to Rule 1111 would not significantly affect air quality and emission limitations. Therefore, no socioeconomic impact assessment was required under Health and Safety Codes Sections 40440.8 and 40728.5.

Amended Rule 2001 – Applicability, & Amended Rule 2002 – Allocations for Oxides Of Nitrogen (NOx) and Oxides of Sulfur (SOx) (October 5, 2018)

The October 2018 amendments to Rule 2001 and Rule 2002 are administrative in nature and do not impose new or more stringent emission limits or standards, and therefore do not directly result in additional economic costs to RECLAIM facilities. However, as subsequent command-and-control rules are amended to address future BARCT limits, facilities will likely incur potentially significant economic costs, as these facilities must comply with these new BARCT requirements.

Given the uncertainty regarding new BARCT requirements for subsequent command-and-control rules affecting transitioning RECLAIM facilities, it is speculative to estimate the economic costs associated with these future rule amendments. In 2018, four rules were amended that specifically applied to facilities transitioning out of the NOx RECLAIM program and that included BARCT requirements and projected economic impacts: 1) Amended Rules 1146, 1146.1, and 1146.2 in December 2018 for boilers, process heaters, steam generator and large water heaters; 2) Amended Rule 1135 in 2018 for electricity generating facilities. Socioeconomic assessments were prepared for these rule amendments.

As more command-and-control rules are adopted/amended to accommodate additional groups of facilities exiting the RECLAIM program, the total economic costs to all facilities exiting RECLAIM (and macroeconomic impacts to the South Coast Air Basin) will become clearer. At this point in the RECLAIM transition, however, it would be speculative to assume what the new BARCT requirements and projected economic impacts will be, as most BARCT assessments have not yet been conducted.

Other Projects without Socioeconomic Impacts

Amended Best Available Control Technology (BACT) Guidelines (February 2, 2018)

Amendments to the BACT Guidelines were adopted to maintain consistency with recent changes to South Coast AQMD rules and state requirements. The amended BACT Guidelines were updated to reflect achieved-in-practice emission control equipment and/or processes and include other administrative changes which were concluded to not result in more stringent requirements than would otherwise occur and would not result in any significant socioeconomic impacts. Therefore, a socioeconomic impact assessment was not required.

Amended 1-Hour Ozone Standard Attainment Demonstration (November 2, 2018)

In order to demonstrate attainment with the 1-hour ozone standard by 2022, the attainment demonstration for the federal 1979 1-hour ozone standard that was included in the 2016 AQMP was updated by: 1) making the emissions inventory consistent with final emissions inventory used for the attainment demonstrations of the 8-hour ozone and PM2.5 standards in the 2016 AQMP; 2) revising the air quality modeling; and 3) revising the attainment strategy for meeting the 1-hour ozone standard by removing emission reductions from CARB's SIP strategies, including federal Clean Air Section 182(e)(5) measures ("black box" measures) since they are no longer needed to demonstrate attainment with the 1-hour ozone standard. Since this project was not a rule and the update did not add or delete control measures from the previously adopted 2016 AQMP, the analysis concluded that the changes would not significantly affect air quality or emission limitations. Therefore, no socioeconomic impact assessment was required or conducted pursuant to Health and Safety Code Sections 40440.8 and 40728.5. In addition, because the amended 1-hour ozone standard attainment demonstration did not change the control measures that will be implemented, no socioeconomic impacts would occur.

Existing Rules/Regulation with Ongoing Socioeconomic Impacts

<u>Amended Regulation III – Fees (May 4, 2018), and Ongoing Rule 320 - Automatic Adjustment Based on Consumer Price Index (CPI) for Regulation III Fees</u>

Pursuant to Rule 320, an across-the-board 3.4-percent increase in fee rates (equivalent to the change in the California CPI from December 2016 to December 2017) occurred on July 1, 2018. The fee increase is applicable to most fees occurring within Rules 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314, and 315. The October 29, 2010 South Coast AQMD 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. However, a socioeconomic assessment was conducted to assess the cost impacts of the fee increase and to provide background

information, such as historical trends of South Coast AQMD revenues from various fees and sectoral distributions of these fees.

Nearly all the facilities regulated by the South Coast AQMD 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 \$2.74 million to the South Coast AQMD. Based on the fee categories examined in the analysis, the manufacturing sector as a whole would experience the largest increase in fees (approximately \$1.20 million for about 3,700 facilities), followed by the services sector (approximately \$0.49 million for about 10,600 facilities) and the retail trade sector (approximately \$0.37 million for about 4,000 facilities). Within the manufacturing sector, the petroleum and coal products manufacturing industry, mostly comprised of refineries, will experience an increase of approximately \$0.51 million.

CHAPTER II ENGINEERING AND PERMITTING ACTIVITIES

ENGINEERING AND PERMITTING

During CY 2018, South Coast AQMD dispositioned a total of 9,726 applications. The majority of these applications were for Permits to Operate (3,440), Area Sources & Certified/ Registrations (1,556), and Changes of Operators (1,332). Also, 1,119 permits were not renewed. The total number of dispositioned applications for 2018 is about 7% lower than the total for 2017, mainly attributed to the South Coast AQMD's Permit Application Backlog Reduction efforts that peaked in 2017. This data, broken down into nine different categories, is summarized below in Table 1.

TABLE - 1 Permit Applications Completed Duri	ing CY 2018
Туре	Count
Permits to Construct	431
Permits to Operate	3,440*
Changes of Operator	1,322
Denials	19
Cancellations	577
ERCs	143
Plans	2,051
Title V/RECLAIM	187
Area Sources & Certified/Registrations	1,556
Total	9,726
Permits Not Renewed	1,119

^{*}This includes 2,190 applications for Permit to Construct that were issued as Permits to Construct/Operate

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.

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
111332	Grape Vineyards							7			
111422	Floriculture Production			2							
111920	Cotton Farming							1			
111998	All Other Miscellaneous Crop Farming	1	2			1		3			
112120	Dairy Cattle and Milk Production			2				1		2	
112990	All Other Animal Production		1	1				2		1	
115112	Soil Preparation, Planting, and Cultivating		1								
115114	Postharvest Crop Activities (except Cotton Ginning)					1					
115115	Farm Labor Contractors and Crew Leaders							2			
115210	Support Activities for Animal Production		3	3				1			
211110	Oil and Gas Extraction									5	
211111	Crude Petroleum and Natural Gas Extraction	6	36			12	4	5	4	12	6
211112	Natural Gas Liquid Extraction									9	
211120	#N/A							1			
212210	Iron Ore Mining		4								
212319	Other Crushed and Broken Stone Mining and Quarrying		3			1					
212321	Construction Sand and Gravel Mining		8			1					
212393	Other Chemical and Fertilizer Mineral Mining		1								
212399	All Other Nonmetallic Mineral Mining		2							2	
213112	Support Activities for Oil and Gas Operations		6	2						2	4
221111	Hydroelectric Power Generation							1			
221112	Fossil Fuel Electric Power Generation	4	48	2		3		4	9	3	2

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
221117	Biomass Electric Power Generation								1		
221118	Other Electric Power Generation	4	10	3		4		10	4		1
221122	Electric Power Distribution							1		1	
221210	Natural Gas Distribution		7					1	2	2	
221310	Water Supply and Irrigation Systems	3	37	1		1		23		16	
221320	Sewage Treatment Facilities	2	26			7		15	1	4	
221330	Steam and Air-Conditioning Supply		4					5			
230000	Construction										1
236115	New Single-Family Housing Construction (except For-Sale Builders)		15	1		2		7		74	34
236116	New Multifamily Housing Construction (except For-Sale Builders)		2					8			1
236117	New Housing For-Sale Builders		5								
236118	Residential Remodelers									2	
236210	Industrial Building Construction							1		13	2
236220	Commercial and Institutional Building Construction		32					4		6	1
237110	Water and Sewer Line and Related Structures Construction		4					2	1	2	1
237120	Oil and Gas Pipeline and Related Structures Construction										2
237210	Land Subdivision	1	3					14		2	3
237310	Highway, Street, and Bridge Construction		2			8				3	1
237990	Other Heavy and Civil Engineering Construction		2								1
238110	Poured Concrete Foundation and Structure Contractors		10	3		1		2			
238130	Framing Contractors							1			1
238140	Masonry Contractors		3					1			2

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
238160	Roofing Contractors					1				20	2
238210	Electrical Contractors and Other Wiring Installation Contractors	1	9			3		3		12	2
238220	Plumbing, Heating, and Air- Conditioning Contractors	1	2					8			1
238310	Drywall and Insulation Contractors					1				8	23
238320	Painting and Wall Covering Contractors		3	1							11
238340	Tile and Terrazzo Contractors		3								
238350	Finish Carpentry Contractors			1							3
238390	Other Building Finishing Contractors					2					
238910	Site Preparation Contractors							3		64	16
238990	All Other Specialty Trade Contractors		29	32		1		6		99	116
311111	Dog and Cat Food Manufacturing		1			2			1		1
311211	Flour Milling	5									
311224	Soybean and Other Oilseed Processing							3			
311351	Chocolate and Confectionery Manufacturing from Cacao Beans		2								
311412	Frozen Specialty Food Manufacturing		4			3		3			1
311421	Fruit and Vegetable Canning		2								
311422	Specialty Canning		4					1		2	
311511	Fluid Milk Manufacturing		11								
311513	Cheese Manufacturing							1			
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing							1			
311611	Animal (except Poultry) Slaughtering		4	75		7		1	2	3	
311612	Meat Processed from Carcasses	4	1			2		5		1	

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
311613	Rendering and Meat Byproduct Processing		14						2	2	
311710	Seafood Product Preparation and Packaging		7								
311811	Retail Bakeries									1	
311812	Commercial Bakeries	2	2				13	1	1		
311821	Cookie and Cracker Manufacturing		3			3					
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	1	1			3					
311830	Tortilla Manufacturing		9			9		1		5	
311911	Roasted Nuts and Peanut Butter Manufacturing					1		1			
311919	Other Snack Food Manufacturing	10	7					1	1		
311920	Coffee and Tea Manufacturing		11					1			
311930	Flavoring Syrup and Concentrate Manufacturing	1	19						1		
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing		2								
311942	Spice and Extract Manufacturing		18			2					
311999	All Other Miscellaneous Food Manufacturing		7	1				2		3	4
312111	Soft Drink Manufacturing		4	3				1			
312112	Bottled Water Manufacturing		2								
312120	Breweries		3			1		1	3	12	
312140	Distilleries		3				1				
313210	Broadwoven Fabric Mills	2	8	2					2		
313240	Knit Fabric Mills		2								
313310	Textile and Fabric Finishing Mills	7	20			3			4		
313320	Fabric Coating Mills	2	3	4							
314110	Carpet and Rug Mills		1			1					

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
314999	All Other Miscellaneous Textile Product Mills		3			1					
315190	Other Apparel Knitting Mills										1
315220	Men's and Boys' Cut and Sew Apparel Manufacturing		1								
315990	Apparel Accessories and Other Apparel Manufacturing									2	
316998	All Other Leather Good and Allied Product Manufacturing										1
321211	Hardwood Veneer and Plywood Manufacturing		1								5
321911	Wood Window and Door Manufacturing					1		1			
321918	Other Millwork (including Flooring)		1							1	
321991	Manufactured Home (Mobile Home) Manufacturing		3								
321999	All Other Miscellaneous Wood Product Manufacturing										1
322110	Pulp Mills			2		1		1			
322121	Paper (except Newsprint) Mills	5	2						1		
322130	Paperboard Mills	2	6			1			3		
322211	Corrugated and Solid Fiber Box Manufacturing		10	7					1	2	
322212	Folding Paperboard Box Manufacturing		1					2			
322220	Paper Bag and Coated and Treated Paper Manufacturing	1	1						1	1	
322291	Sanitary Paper Product Manufacturing		2								
323111	Commercial Printing (except Screen and Books)		23			5	1	3		1	6
323113	Commercial Screen Printing		1								
324110	Petroleum Refineries	27	66	224		58	7	25	38	14	4

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
324121	Asphalt Paving Mixture and Block Manufacturing		25			50	2		1		
324122	Asphalt Shingle and Coating Materials Manufacturing	3	24					2	5	2	
324191	Petroleum Lubricating Oil and Grease Manufacturing	7	13					1	4		
325110	Petrochemical Manufacturing		1			1		4			1
325120	Industrial Gas Manufacturing	2	2						3		1
325130	Synthetic Dye and Pigment Manufacturing		8	52		1					
325180	Other Basic Inorganic Chemical Manufacturing		17	13					1	1	
325199	All Other Basic Organic Chemical Manufacturing		2							1	
325211	Plastics Material and Resin Manufacturing	1	15				1	2	4	2	
325212	Synthetic Rubber Manufacturing		6	68				2	1	6	
325311	Nitrogenous Fertilizer Manufacturing		1	2							1
325411	Medicinal and Botanical Manufacturing		1			1		5	1		
325412	Pharmaceutical Preparation Manufacturing	2	16			4	3	7	2		3
325414	Biological Product (except Diagnostic) Manufacturing							2		6	
325510	Paint and Coating Manufacturing	21	7			7				1	9
325520	Adhesive Manufacturing		6			1					
325612	Polish and Other Sanitation Good Manufacturing		7								
325620	Toilet Preparation Manufacturing		11	1		1				2	15
325992	Photographic Film, Paper, Plate, and Chemical Manufacturing		2								
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing		16			1			1		

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
326111	Plastics Bag and Pouch Manufacturing	2	3								
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing	3	3			1		3	2		
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	2	7								
326121	Unlaminated Plastics Profile Shape Manufacturing		8			3					
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing		1					3			
326140	Polystyrene Foam Product Manufacturing		1					1		6	
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing		1			3				3	
326160	Plastics Bottle Manufacturing		2								
326191	Plastics Plumbing Fixture Manufacturing		1					1	1		3
326199	All Other Plastics Product Manufacturing	1	60			6	15	2		1	5
326211	Tire Manufacturing (except Retreading)	1									
326212	Tire Retreading		2	5							
326291	Rubber Product Manufacturing for Mechanical Use		8			1					
326299	All Other Rubber Product Manufacturing	3	5			2		1		1	
327120	Clay Building Material and Refractories Manufacturing	5	2						2		
327213	Glass Container Manufacturing		8			4		1	3	1	
327215	Glass Product Manufacturing Made of Purchased Glass		3								
327310	Cement Manufacturing		-				16	1			

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
327320	Ready-Mix Concrete Manufacturing		37			4					5
327331	Concrete Block and Brick Manufacturing		1							1	2
327390	Other Concrete Product Manufacturing		9	9						2	
327420	Gypsum Product Manufacturing		1						1		
327910	Abrasive Product Manufacturing										6
327991	Cut Stone and Stone Product Manufacturing		2								
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing		7								10
331110	Iron and Steel Mills and Ferroalloy Manufacturing	2	3			2		1	3		
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel		9			2		1		2	
331221	Rolled Steel Shape Manufacturing	2	2								
331222	Steel Wire Drawing	2	6						3		
331313	Alumina Refining and Primary Aluminum Production									1	
331315	Aluminum Sheet, Plate, and Foil Manufacturing		9						1	7	
331318	Other Aluminum Rolling, Drawing, and Extruding		3	10				1	4	6	
331420	Copper Rolling, Drawing, Extruding, and Alloying		2			3					
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding		7	14							
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	5	3			3			3		
331512	Steel Investment Foundries		9					1		2	
331513	Steel Foundries (except Investment)		1			1					

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
331523	Nonferrous Metal Die-Casting Foundries		2							2	1
331524	Aluminum Foundries (except Die- Casting)		3								3
331529	Other Nonferrous Metal Foundries (except Die-Casting)		1								
332111	Iron and Steel Forging	5	9						2		
332112	Nonferrous Forging	15	14			17			6	5	
332114	Custom Roll Forming								1		
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing		1								
332216	Saw Blade and Handtool Manufacturing		5								2
332311	Prefabricated Metal Building and Component Manufacturing		2								
332312	Fabricated Structural Metal Manufacturing							2			2
332313	Plate Work Manufacturing		1								
332321	Metal Window and Door Manufacturing		4								
332322	Sheet Metal Work Manufacturing	1	24			2					
332323	Ornamental and Architectural Metal Work Manufacturing										4
332410	Power Boiler and Heat Exchanger Manufacturing							1			
332420	Metal Tank (Heavy Gauge) Manufacturing		1								
332431	Metal Can Manufacturing		2					2	1	2	
332439	Other Metal Container Manufacturing		2					1			
332510	Hardware Manufacturing		2								1
332613	Spring Manufacturing		2								
332710	Machine Shops	1	3							1	1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
332721	Precision Turned Product Manufacturing		2					1			
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing		10			1				3	
332811	Metal Heat Treating	7	12						1		1
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	4	30	5		2		1	2		2
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	9	55	4		12		6		3	34
332912	Fluid Power Valve and Hose Fitting Manufacturing		1								
332913	Plumbing Fixture Fitting and Trim Manufacturing	2	5								
332919	Other Metal Valve and Pipe Fitting Manufacturing									2	
332996	Fabricated Pipe and Pipe Fitting Manufacturing		7			4		1	2		
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	2	9								
333111	Farm Machinery and Equipment Manufacturing		5								
333120	Construction Machinery Manufacturing		4						1		
333132	Oil and Gas Field Machinery and Equipment Manufacturing		1			1					
333241	Food Product Machinery Manufacturing							1			
333314	Optical Instrument and Lens Manufacturing		3								2
333318	Other Commercial and Service Industry Machinery Manufacturing		6	1				1			1
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing		2			1					1
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial		6					9			

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
	and Industrial Refrigeration Equipme										
333511	Industrial Mold Manufacturing					1					
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing		1			1					
333517	Machine Tool Manufacturing		2								
333612	Speed Changer, Industrial High- Speed Drive, and Gear Manufacturing					1					
333618	Other Engine Equipment Manufacturing		4	8		1					
333911	Pump and Pumping Equipment Manufacturing		3								
333912	Air and Gas Compressor Manufacturing		7								
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	9						1			
333992	Welding and Soldering Equipment Manufacturing										1
333999	All Other Miscellaneous General Purpose Machinery Manufacturing		1							2	
334111	Electronic Computer Manufacturing		1								
334112	Computer Storage Device Manufacturing										2
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing		1							1	
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	1	3					9			
334290	Other Communications Equipment Manufacturing										1
334310	Audio and Video Equipment Manufacturing		1								

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
334413	Semiconductor and Related Device Manufacturing		14			2		1			5
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing					1					
334417	Electronic Connector Manufacturing	2									
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing		7			1		2			1
334419	Other Electronic Component Manufacturing		14	2							1
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing		2			5		4			
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufactu										1
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use										1
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industria		3	2						1	
334514	Totalizing Fluid Meter and Counting Device Manufacturing		1								3
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals					3		1		17	
334516	Analytical Laboratory Instrument Manufacturing		77			15		5			1
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing							1			1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
335121	Residential Electric Lighting Fixture Manufacturing		5			1					
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing		2								
335129	Other Lighting Equipment Manufacturing										1
335220	#N/A		1								
335311	Power, Distribution, and Specialty Transformer Manufacturing			9							
335312	Motor and Generator Manufacturing		2								
335313	Switchgear and Switchboard Apparatus Manufacturing		3								
335911	Storage Battery Manufacturing	13	15		1	6		2			
335931	Current-Carrying Wiring Device Manufacturing							1			
335991	Carbon and Graphite Product Manufacturing								1		
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing		1	1						1	
336111	Automobile Manufacturing		2								2
336211	Motor Vehicle Body Manufacturing		9								2
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	1									
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing									1	
336390	Other Motor Vehicle Parts Manufacturing	5	17			3		12	1		
336411	Aircraft Manufacturing	5	12	1		4		8	3	4	
336412	Aircraft Engine and Engine Parts Manufacturing	3	2			2		3	2		1

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	2	15	1		3		5			
336414	Guided Missile and Space Vehicle Manufacturing	7	10								
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing						1	1		1	
337110	Wood Kitchen Cabinet and Countertop Manufacturing		4	11				1			2
337121	Upholstered Household Furniture Manufacturing		3								1
337122	Nonupholstered Wood Household Furniture Manufacturing		3	4		1		1			1
337124	Metal Household Furniture Manufacturing										5
337125	Household Furniture (except Wood and Metal) Manufacturing			1							
337127	Institutional Furniture Manufacturing		7					1			
337211	Wood Office Furniture Manufacturing										3
337212	Custom Architectural Woodwork and Millwork Manufacturing		3								1
337214	Office Furniture (except Wood) Manufacturing					1				1	1
337215	Showcase, Partition, Shelving, and Locker Manufacturing		1								
339112	Surgical and Medical Instrument Manufacturing		8					5		1	
339113	Surgical Appliance and Supplies Manufacturing			3						1	
339114	Dental Equipment and Supplies Manufacturing		8			4				3	
339115	Ophthalmic Goods Manufacturing	3	31			1					
339910	Jewelry and Silverware Manufacturing			1				1			

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
339920	Sporting and Athletic Goods Manufacturing		1								1
339950	Sign Manufacturing		6								
339991	Gasket, Packing, and Sealing Device Manufacturing		3							1	
339992	Musical Instrument Manufacturing	1	1			1		1			
339999	All Other Miscellaneous Manufacturing		7								2
423110	Automobile and Other Motor Vehicle Merchant Wholesalers		3			1					
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers		5	1				1		2	4
423130	Tire and Tube Merchant Wholesalers							1			
423140	Motor Vehicle Parts (Used) Merchant Wholesalers		2								
423210	Furniture Merchant Wholesalers		3					1		1	5
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers		5	1							1
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers		21	6	2	3	2			2	
423390	Other Construction Material Merchant Wholesalers									1	
423410	Photographic Equipment and Supplies Merchant Wholesalers							1			
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	1	5					1			1
423440	Other Commercial Equipment Merchant Wholesalers		2								
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	1	2					1			
423490	Other Professional Equipment and Supplies Merchant Wholesalers							1			

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
423510	Metal Service Centers and Other Metal Merchant Wholesalers		7			4					2
423520	Coal and Other Mineral and Ore Merchant Wholesalers							1			
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers		3					1			
423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers										3
423690	Other Electronic Parts and Equipment Merchant Wholesalers							3			
423710	Hardware Merchant Wholesalers		1	1						1	
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers									15	
423730	Warm Air Heating and Air- Conditioning Equipment and Supplies Merchant Wholesalers							1			
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers		3			1		1		3	
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers										1
423830	Industrial Machinery and Equipment Merchant Wholesalers		4	3		2		2	1	5	3
423840	Industrial Supplies Merchant Wholesalers		1	19						1	4
423850	Service Establishment Equipment and Supplies Merchant Wholesalers		2							1	
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers		3			3		1			
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers		2								

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers							3			1
423930	Recyclable Material Merchant Wholesalers	3	29			3		10			2
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers									1	
423990	Other Miscellaneous Durable Goods Merchant Wholesalers		2	2		10		2			6
424210	Drugs and Druggists' Sundries Merchant Wholesalers		16								
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers							1			
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers		5					1			
424340	Footwear Merchant Wholesalers			2				2			1
424410	General Line Grocery Merchant Wholesalers	2	5					3			
424420	Packaged Frozen Food Merchant Wholesalers		1					1			
424450	Confectionery Merchant Wholesalers		1								
424470	Meat and Meat Product Merchant Wholesalers	2	1								
424480	Fresh Fruit and Vegetable Merchant Wholesalers							3			
424490	Other Grocery and Related Products Merchant Wholesalers		6					1			
424690	Other Chemical and Allied Products Merchant Wholesalers		11								3
424710	Petroleum Bulk Stations and Terminals	5	17	1			4	4	3		
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	4	19	7				2			1
424810	Beer and Ale Merchant Wholesalers		14			2					

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
424910	Farm Supplies Merchant Wholesalers		2								
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers		1								1
424950	Paint, Varnish, and Supplies Merchant Wholesalers		2								
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers		2	30		1			1	1	4
441110	New Car Dealers		11	1		1	1	3			3
441120	Used Car Dealers			3							1
441210	Recreational Vehicle Dealers		1								
441228	Motorcycle, ATV, and All Other Motor Vehicle Dealers		3								
441310	Automotive Parts and Accessories Stores		7	4				1		1	4
441320	Tire Dealers			6				1			2
442110	Furniture Stores		2	1				1		2	9
442299	All Other Home Furnishings Stores		2	1						1	2
443141	Household Appliance Stores							1			1
443142	Electronics Stores		4	1				8			
444110	Home Centers		5	4							4
444120	Paint and Wallpaper Stores		2	1							
444130	Hardware Stores		1			1					
444190	Other Building Material Dealers	10	4	1				1			4
444210	Outdoor Power Equipment Stores		1								
444220	Nursery, Garden Center, and Farm Supply Stores		10								
445110	Supermarkets and Other Grocery (except Convenience) Stores	1	30	3		9	1	335	1	11	4
445120	Convenience Stores	5	41	3		2		14		1	
445220	Fish and Seafood Markets									1	
445230	Fruit and Vegetable Markets										1

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NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
445291	Baked Goods Stores									2	1
445299	All Other Specialty Food Stores		2				2	3		1	1
445310	Beer, Wine, and Liquor Stores		2							1	
446110	Pharmacies and Drug Stores					1		71		1	
446191	Food (Health) Supplement Stores			1				2			
446199	All Other Health and Personal Care Stores		2								
447100	Gasoline Stations										1
447110	Gasoline Stations with Convenience Stores	1	19						1	1	
447190	Other Gasoline Stations	22	204	42		4	2	6		1	7
448110	Men's Clothing Stores		1					2			
448120	Women's Clothing Stores										2
448140	Family Clothing Stores		1	1				4			1
448150	Clothing Accessories Stores							2			
448210	Shoe Stores							4			
448310	Jewelry Stores			4				1			
451110	Sporting Goods Stores			1							1
451120	Hobby, Toy, and Game Stores			1						1	1
452111	Department Stores (except Discount Department Stores)		2					30		7	4
452112	Discount Department Stores		1					17		41	
452210	#N/A			2				2		1	
452910	Warehouse Clubs and Supercenters		49			1	19	1		42	
452990	All Other General Merchandise Stores							22			
453110	Florists			1		_		3		1	3
453210	Office Supplies and Stationery Stores										1
453220	Gift, Novelty, and Souvenir Stores		4								

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
453310	Used Merchandise Stores		10			3		1			
453910	Pet and Pet Supplies Stores		1								5
453998	All Other Miscellaneous Store Retailers (except Tobacco Stores)		7	5				12		25	3
454210	Vending Machine Operators										1
454310	Fuel Dealers	1	9								1
454390	Other Direct Selling Establishments		1	10				1		2	1
481111	Scheduled Passenger Air Transportation		2	1				2	1		
481112	Scheduled Freight Air Transportation	1	3								
481219	Other Nonscheduled Air Transportation		2								
482111	Line-Haul Railroads										1
483112	Deep Sea Passenger Transportation		2					1			
484110	General Freight Trucking, Local		18					2		5	10
484121	General Freight Trucking, Long- Distance, Truckload		4	1						2	
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance							1			
485111	Mixed Mode Transit Systems		12					4		1	
485113	Bus and Other Motor Vehicle Transit Systems		2					4			
485210	Interurban and Rural Bus Transportation			1							
485310	Taxi Service							2		2	
485320	Limousine Service		1								
485410	School and Employee Bus Transportation		2					1			
485999	All Other Transit and Ground Passenger Transportation					1					
486110	Pipeline Transportation of Crude Oil		3			4			1		

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
486210	Pipeline Transportation of Natural Gas	2	9			6		2	1		
487210	Scenic and Sightseeing Transportation, Water										1
487990	Scenic and Sightseeing Transportation, Other							1			
488111	Air Traffic Control		23			4			2		
488119	Other Airport Operations	2	10	7		2		3	3	1	
488190	Other Support Activities for Air Transportation		5	1				1	1		5
488210	Support Activities for Rail Transportation		1			2					1
488310	Port and Harbor Operations		1						1		
488320	Marine Cargo Handling		3								
488410	Motor Vehicle Towing										2
488490	Other Support Activities for Road Transportation		5								
488510	Freight Transportation Arrangement		3	4				1			
488999	All Other Support Activities for Transportation		2	2				4		2	4
491110	Postal Service							4			
492210	Local Messengers and Local Delivery		1								
493110	General Warehousing and Storage		5	2				8		7	4
493120	Refrigerated Warehousing and Storage		2								
493190	Other Warehousing and Storage		2				1	1			1
511110	Newspaper Publishers		1					1			
511120	Periodical Publishers			2							
511130	Book Publishers		1					1			
511210	Software Publishers		1	2				1			

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
512110	Motion Picture and Video Production		6	3		30		19		1	2
512120	Motion Picture and Video Distribution		2								
512131	Motion Picture Theaters (except Drive-Ins)		1								
512191	Teleproduction and Other Postproduction Services	2	1			1					1
512240	Sound Recording Studios							1			
515111	Radio Networks		1	1							
515112	Radio Stations							1			
515120	Television Broadcasting			3	1			3			
515210	Cable and Other Subscription Programming		1					4			6
517110	Wired Telecommunications Carriers							11			1
517210	Wireless Telecommunications Carriers (except Satellite)	1	4		1			4		1	1
517311	#N/A	1		1						1	
517312	#N/A			1							
517911	Telecommunications Resellers		4	2				106			1
517919	All Other Telecommunications		2	4				3		1	1
518210	Data Processing, Hosting, and Related Services		1					3			
519120	Libraries and Archives		4					10		1	
521110	Monetary Authorities-Central Bank							4			
522110	Commercial Banking							6			4
522120	Savings Institutions							1	1		
522130	Credit Unions		1					4			
522220	Sales Financing										1
522293	International Trade Financing		1								

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
522298	All Other Nondepository Credit Intermediation							1			
522310	Mortgage and Nonmortgage Loan Brokers			1				7		1	1
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities			1							
522390	Other Activities Related to Credit Intermediation		1					1			
523110	Investment Banking and Securities Dealing										1
523910	Miscellaneous Intermediation		4	3				3		1	4
523920	Portfolio Management			2				1		1	
523930	Investment Advice		1			1		6			
523991	Trust, Fiduciary, and Custody Activities		1	1							
524113	Direct Life Insurance Carriers							1			
524114	Direct Health and Medical Insurance Carriers		1	2				1			1
524126	Direct Property and Casualty Insurance Carriers			1				8			
524127	Direct Title Insurance Carriers		2								
524210	Insurance Agencies and Brokerages		1					1			
524298	All Other Insurance Related Activities									36	
525910	Open-End Investment Funds							1			
525920	Trusts, Estates, and Agency Accounts		1	2				4			
525990	Other Financial Vehicles			2				2			
531110	Lessors of Residential Buildings and Dwellings	1	21	5				8		2	4
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)		2	6				24		2	2

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
531130	Lessors of Miniwarehouses and Self-Storage Units	5							1		
531190	Lessors of Other Real Estate Property	5						2			1
531210	Offices of Real Estate Agents and Brokers		10	7		2		58		1	9
531311	Residential Property Managers		1					1			1
531312	Nonresidential Property Managers			1				8		2	
532111	Passenger Car Rental		1	1		1		1			1
532120	Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing		2	2							2
532230	Video Tape and Disc Rental		2								
532289	#N/A			6							
532299	All Other Consumer Goods Rental							2			1
532411	Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing		7					3			
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing		1							14	2
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing		5	6				1			
541110	Offices of Lawyers		2	6				7			1
541213	Tax Preparation Services						1			12	
541219	Other Accounting Services							2			
541310	Architectural Services							3		1	1
541330	Engineering Services	28	19	48		2		7		1	8
541380	Testing Laboratories		1					1		16	3
541410	Interior Design Services										9
541430	Graphic Design Services		6			1					

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
541490	Other Specialized Design Services		10								
541511	Custom Computer Programming Services			2				3		1	2
541512	Computer Systems Design Services									1	
541611	Administrative Management and General Management Consulting Services	11	16	1		3		2	1	4	4
541613	Marketing Consulting Services		1	2			2			1	
541614	Process, Physical Distribution, and Logistics Consulting Services		1								
541618	Other Management Consulting Services		1					5		38	1
541620	Environmental Consulting Services		13	2		1		2		37	8
541690	Other Scientific and Technical Consulting Services		5			1				2	6
541711	Research and Development in Biotechnology		7			5					6
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)		11					3		1	2
541715	#N/A							1			
541720	Research and Development in the Social Sciences and Humanities			1				3			
541810	Advertising Agencies							3			
541860	Direct Mail Advertising		1					4			
541890	Other Services Related to Advertising		1								1
541910	Marketing Research and Public Opinion Polling		3	1				3			
541921	Photography Studios, Portrait							1			1
541922	Commercial Photography		1								
541930	Translation and Interpretation Services							1			
541940	Veterinary Services	1	1							1	

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
541990	All Other Professional, Scientific, and Technical Services		11	4		3	3	7		5	1
551111	Offices of Bank Holding Companies		1								
551112	Offices of Other Holding Companies		2	6				5			
561110	Office Administrative Services		5	3		2		11			4
561210	Facilities Support Services		29			2		4		77	
561311	Employment Placement Agencies		3					1			
561320	Temporary Help Services							1		1	
561421	Telephone Answering Services							3			
561499	All Other Business Support Services		43	6			1	16		6	17
561510	Travel Agencies		2	1							
561520	Tour Operators										1
561612	Security Guards and Patrol Services										1
561622	Locksmiths		1							1	1
561710	Exterminating and Pest Control Services							2			
561720	Janitorial Services		10	4				2		14	4
561730	Landscaping Services		5		1	5		1			2
561740	Carpet and Upholstery Cleaning Services			1							2
561790	Other Services to Buildings and Dwellings		6	4				2		1	2
561910	Packaging and Labeling Services		13			6		2			
561920	Convention and Trade Show Organizers			1							1
561990	All Other Support Services	8	20	8	1	17		10		15	23
562111	Solid Waste Collection		2					1			
562112	Hazardous Waste Collection							1			2

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
562211	Hazardous Waste Treatment and Disposal	1	9	5						16	1
562212	Solid Waste Landfill		27		1	12	1	20	4	8	2
562219	Other Nonhazardous Waste Treatment and Disposal		6			4					
562910	Remediation Services		10							111	8
562920	Materials Recovery Facilities		16							1	2
562991	Septic Tank and Related Services									1	
562998	All Other Miscellaneous Waste Management Services		3								
611110	Elementary and Secondary Schools		15		1	1		146		27	11
611210	Junior Colleges		11					4	1	2	
611310	Colleges, Universities, and Professional Schools		13					55		17	1
611512	Flight Training		1								
611519	Other Technical and Trade Schools							2			
611620	Sports and Recreation Instruction	1									2
611699	All Other Miscellaneous Schools and Instruction		3					2			
611710	Educational Support Services							1			
621111	Offices of Physicians (except Mental Health Specialists)		8					11		36	4
621112	Offices of Physicians, Mental Health Specialists		1					4			1
621210	Offices of Dentists		2					5		3	
621310	Offices of Chiropractors							2			1
621320	Offices of Optometrists									1	
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists									1	
621399	Offices of All Other Miscellaneous Health Practitioners		1								

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
621410	Family Planning Centers							1			
621420	Outpatient Mental Health and Substance Abuse Centers							1		1	
621491	HMO Medical Centers		9					3	1		
621492	Kidney Dialysis Centers		2	2							1
621493	Freestanding Ambulatory Surgical and Emergency Centers			1				2			
621498	All Other Outpatient Care Centers									1	2
621511	Medical Laboratories		2					2			
621610	Home Health Care Services		6	1				1			
621991	Blood and Organ Banks		1					2			
621999	All Other Miscellaneous Ambulatory Health Care Services		1	1				5			1
622110	General Medical and Surgical Hospitals		30	5	2	2		53			2
622210	Psychiatric and Substance Abuse Hospitals		6					4		1	3
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals							3			
623110	Nursing Care Facilities (Skilled Nursing Facilities)		8					2		4	1
623220	Residential Mental Health and Substance Abuse Facilities		1					2			
623311	Continuing Care Retirement Communities		3								
623312	Assisted Living Facilities for the Elderly							1			
623990	Other Residential Care Facilities		3					3			1
624110	Child and Youth Services		1							1	
624120	Services for the Elderly and Persons with Disabilities		2					2		1	2
624190	Other Individual and Family Services		2	1				4			
624310	Vocational Rehabilitation Services		2								

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
624410	Child Day Care Services							3		1	
711130	Musical Groups and Artists			1							
711190	Other Performing Arts Companies		3	1				1			
711211	Sports Teams and Clubs										1
711219	Other Spectator Sports		2								
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities							2			
711410	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures			3				4			
711510	Independent Artists, Writers, and Performers		2								6
712110	Museums		1					1		1	
713110	Amusement and Theme Parks	13	29			7		2	2	5	
713910	Golf Courses and Country Clubs		6	5				3		9	
713920	Skiing Facilities			2		1			1	5	
713940	Fitness and Recreational Sports Centers		2					8			2
713950	Bowling Centers										1
721110	Hotels (except Casino Hotels) and Motels		6	3	1			15		10	5
721214	Recreational and Vacation Camps (except Campgrounds)		2					1			
722320	Caterers		1							2	5
722330	Mobile Food Services									1	
722410	Drinking Places (Alcoholic Beverages)		2	1		1		3		2	5
722511	Full-Service Restaurants	3	10	6			2	13		69	47
722513	Limited-Service Restaurants	1	11	1		1		6		53	77
722514	Cafeterias, Grill Buffets, and Buffets									1	

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
722515	Snack and Nonalcoholic Beverage Bars							1			
811111	General Automotive Repair		26	21		2		5		5	18
811112	Automotive Exhaust System Repair		1							1	
811113	Automotive Transmission Repair			1							
811118	Other Automotive Mechanical and Electrical Repair and Maintenance		14	2		1				1	
811121	Automotive Body, Paint, and Interior Repair and Maintenance	6	96	41	1	5		3		1	63
811122	Automotive Glass Replacement Shops		1								
811191	Automotive Oil Change and Lubrication Shops		1	1							
811192	Car Washes		8	5		1		1			2
811198	All Other Automotive Repair and Maintenance		6	2		3		1			3
811211	Consumer Electronics Repair and Maintenance		2	1							
811219	Other Electronic and Precision Equipment Repair and Maintenance		3								1
811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Mai		14					3			4
811412	Appliance Repair and Maintenance	3	11	1	1			3		21	2
811420	Reupholstery and Furniture Repair		3					1			4
811430	Footwear and Leather Goods Repair							1			
811490	Other Personal and Household Goods Repair and Maintenance		3	1							2
812000	Personal and Laundry Services		1								
812112	Beauty Salons		2							1	
812113	Nail Salons					_				1	1
812199	Other Personal Care Services							1		1	

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
812210	Funeral Homes and Funeral Services		9	1		3					
812220	Cemeteries and Crematories	2	10	1		1		8			
812300	Drycleaning and Laundry Services		1								
812310	Coin-Operated Laundries and Drycleaners					1					2
812320	Drycleaning and Laundry Services (except Coin-Operated)		45	22	2	1		5		1	49
812331	Linen Supply	2	3		1				1		
812332	Industrial Launderers					2		3			2
812910	Pet Care (except Veterinary) Services							1			
812921	Photofinishing Laboratories (except One-Hour)							1			
812930	Parking Lots and Garages		1					6			1
812990	All Other Personal Services		3			1		2			
813110	Religious Organizations		2					13		3	
813319	Other Social Advocacy Organizations		1					1		1	
813410	Civic and Social Organizations		2	2				12		1	7
813910	Business Associations		2					1			
813920	Professional Organizations							2			
813930	Labor Unions and Similar Labor Organizations							2			
813990	Other Similar Organizations (except Business, Professional, Labor, and Political Organizations)		2	1				2			5
921110	Executive Offices	1	12		1	1		17		12	5
921120	Legislative Bodies					1		3			
921130	Public Finance Activities		1								
921190	Other General Government Support		1					7		1	1
922110	Courts							17		1	

Total Ap	plications>	431	3440	1322	19	577	143	2051	187	1556	1119
NAICS code	NAICS Code Description	Permit to Construct	Permit to Operate	Change of Operator	Denied	Cancelled	ERC	Plans	RECLAIM/TV	Area Source/Cert & Registration	Permit Not Renewed
922120	Police Protection		4					18			
922130	Legal Counsel and Prosecution							2			
922140	Correctional Institutions		2			2		1		5	
922150	Parole Offices and Probation Offices							8			
922160	Fire Protection		7					1		1	
922190	Other Justice, Public Order, and Safety Activities									1	
923110	Administration of Education Programs							3			
923120	Administration of Public Health Programs							2			
923130	Administration of Human Resource Programs (except Education, Public Health, and Veterans' Affairs P		1					2			1
924110	Administration of Air and Water Resource and Solid Waste Management Programs		11			2		7		13	1
924120	Administration of Conservation Programs		1								
925110	Administration of Housing Programs										1
926110	Administration of General Economic Programs							1			1
926120	Regulation and Administration of Transportation Programs		3			1					3
926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities							1		1	
927110	Space Research and Technology		2					2	1		
928110	National Security	1	5			1		4	3		2
999990	Undefined	17	131	222	1	11	37	49	1	71	22

Attachment A

Emission Reduction Credit (ERC) And Short Term Emission Reduction Credit (STERC) Transactions for Fiscal Year 2017-18² (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 2017-18, 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 privately held Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) transactions for Fiscal Year 2017-18, 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 2017-18, 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.

Table 1: Emission Offset Transactions - Fiscal Year 2017-18

Criteria Pollutant	Numl	oer of Emis Trans	sion Offset sactions ³	Transfer	Q		Emission Of sferred ⁴ s/day)	ffsets	Annualized Quantity of Emission Offsets Transferred ³ (tons/year)				
	ERC	STERC ⁵	STERC ⁶	TOTAL	ERC	STERC ⁴	STERC ⁵	TOTAL	ERC	STERC ⁴	STERC ⁵	TOTAL	
ROG	51	1	0	52	781	12	0	793	142.1	2.2	0	144.3	
NOx	3	2	0	5	67	2	0	69	12.2	0.4	0	12.6	
SOx	1	0	0	1	4	0	0	4	0.7	0	0	0.7	
CO	3	0	0	3	82	0	0	82	14.9	0	0	14.9	
PM10	9	14	0	23	34	56	0	90	6.1	10	0	16.1	

Table 2: Emission Offset Applications – Fiscal Year 2017-18

Criteria Pollutant	Number of Banking Applications Resulting in the Issuance of New STERCs ⁷	Quantity of Emission Reductions Achieved (STERCs) ⁸ (lbs/day)	Annualized Quantity of Emission Reductions Achieved ⁷ (tons/year)
ROG	1	37	6.8
NOx	0	0	0
SOx	0	0	0
CO	0	0	0
PM10	2	17	3.1

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² This report does not include RECLAIM Trading Credit (RTC) transactions.

³ Includes all emission offset certificates that transferred ownership.

⁴ Includes the total amount of emission offsets transferred.

⁵ STERC transfer transactions including the long term emission offset, those that have an ending year of 9999.

⁶ 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.

⁷ Includes all emission offset applications resulting in the generation of new certificates.

⁸ Includes the total amount of emission offsets generated.

Table 3: Emission Offset Transaction Summary – Fiscal Year 2017-18
Sorted by Pollutant and Amount

		Sorted by Foil	dtant and min	l		
SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LBS/DAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-001	ROG	1	0.2	ERC	N/A	N/A
SC1718-002	ROG	1	0.2	ERC	N/A	N/A
SC1718-003	ROG	14	2.6	ERC	N/A	N/A
SC1718-004	ROG	6	1.1	ERC	N/A	N/A
SC1718-005	ROG	6	1.1	ERC	N/A	N/A
SC1718-006	ROG	14	2.6	ERC	N/A	N/A
SC1718-007	ROG	13	2.4	ERC	N/A	N/A
SC1718-008	ROG	4	0.7	ERC	N/A	N/A
SC1718-009	ROG	10	1.8	ERC	N/A	N/A
SC1718-010	ROG	2	0.4	ERC	N/A	N/A
SC1718-011	ROG	66	12	ERC	N/A	N/A
SC1718-012	ROG	1	0.2	ERC	N/A	N/A
SC1718-013	ROG	66	12	ERC	N/A	N/A
SC1718-014	ROG	172	31.4	ERC	N/A	N/A
SC1718-015	ROG	16	2.9	ERC	N/A	N/A
SC1718-016	ROG	13	2.4	ERC	N/A	N/A
SC1718-017	ROG	21	3.8	ERC	N/A	N/A
SC1718-018	ROG	10	1.8	ERC	N/A	N/A
SC1718-019	ROG	4	0.7	ERC	N/A	N/A
SC1718-020	ROG	3	0.5	ERC	N/A	N/A
SC1718-021	ROG	9	1.6	ERC	N/A	N/A
SC1718-022	ROG	5	0.9	ERC	N/A	N/A
SC1718-023	ROG	4	0.7	ERC	N/A	N/A
SC1718-024	ROG	14	2.6	ERC	N/A	N/A
SC1718-025	ROG	14	2.6	ERC	N/A	N/A
SC1718-026	ROG	13	2.4	ERC	N/A	N/A
SC1718-027	ROG	16	2.9	ERC	N/A	N/A
SC1718-028	ROG	6	1.1	ERC	N/A	N/A
SC1718-029	ROG	35	6.4	ERC	N/A	N/A
SC1718-030	ROG	4	0.7	ERC	N/A	N/A
SC1718-031	ROG	1	0.2	ERC	N/A	N/A
SC1718-032	ROG	4	0.7	ERC	N/A	N/A
SC1718-033	ROG	16	2.9	ERC	N/A	N/A
SC1718-034	ROG	1	0.2	ERC	N/A	N/A
SC1718-035	ROG	2	0.4	ERC	N/A	N/A
SC1718-036	ROG	0	0.0	STERC	2018	2018
SC1718-037	ROG	12	2.2	STERC	2019	9999
SC1718-038	ROG	38	6.9	ERC	N/A	N/A
SC1718-039	ROG	7	1.3	ERC	N/A	N/A
SC1718-040	ROG	4	0.7	ERC	N/A	N/A
SC1718-041	ROG	4	0.7	ERC	N/A	N/A
SC1718-042	ROG	4	0.7	ERC	N/A	N/A
SC1718-043	ROG	3	0.5	ERC	N/A	N/A

Table 3: Emission Offset Transaction Summary – Fiscal Year 2017-18
Sorted by Pollutant and Amount

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LBS/DAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-044	ROG	3	0.5	ERC	N/A	N/A
SC1718-045	ROG	3	0.5	ERC	N/A	N/A
SC1718-046	ROG	5	0.9	ERC	N/A	N/A
SC1718-047	ROG	3	0.5	ERC	N/A	N/A
SC1718-048	ROG	3	0.5	ERC	N/A	N/A
SC1718-049	ROG	5	0.9	ERC	N/A	N/A
SC1718-050	ROG	5	0.9	ERC	N/A	N/A
SC1718-051	ROG	4	0.7	ERC	N/A	N/A
SC1718-052	ROG	3	0.5	ERC	N/A	N/A
SC1718-053	ROG	100	18.3	ERC	N/A	N/A
Total		793	144.3		N/A	

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LB/SDAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-054	NOx	1	0.2	STERC	2016	9999
SC1718-055	NOx	1	0.2	STERC	2016	9999
SC1718-056	NOx	4	0.7	ERC	N/A	N/A
SC1718-057	NOx	53	9.7	ERC	N/A	N/A
SC1718-058	NOx	10	1.8	ERC	N/A	N/A
Total		69	12.6		N/A	

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LBS/DAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-059	SOx	4	0.7	ERC	N/A	N/A
Total		4	0.7		N/A	

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LBS/DAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-060	CO	28	5.1	ERC	N/A	N/A
SC1718-061	CO	28	5.1	ERC	N/A	N/A
SC1718-062	CO	26	4.7	ERC	N/A	N/A
Total		82	14.9		N/A	

Table 3: Emission Offset Transaction Summary – Fiscal Year 2017-18
Sorted by Pollutant and Amount

	Sorted by Pollutant and Amount								
SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT (LBS/DAY)	AMOUNT (TONS/YR)	ТҮРЕ	START YEAR	END YEAR			
SC1718-063	PM10	0	0.0	STERC	2018	2018			
SC1718-064	PM10	5	0.9	STERC	2019	9999			
SC1718-065	PM10	1	0.2	ERC	N/A	N/A			
SC1718-066	PM10	0	0.0	STERC	2018	2018			
SC1718-067	PM10	0	0.0	STERC	2018	2018			
SC1718-068	PM10	3	0.5	STERC	2019	9999			
SC1718-069	PM10	0	0.0	STERC	2018	2018			
SC1718-070	PM10	4	0.7	STERC	2019	9999			
SC1718-071	PM10	0	0.0	STERC	2018	2018			
SC1718-072	PM10	4	0.7	STERC	2019	9999			
SC1718-073	PM10	0	0.0	STERC	2018	2018			
SC1718-074	PM10	5	0.9	STERC	2019	9999			
SC1718-075	PM10	0	0.0	STERC	2018	2018			
SC1718-076	PM10	4	0.7	STERC	2019	9999			
SC1718-077	PM10	3	0.5	STERC	2018	9999			
SC1718-078	PM10	3	0.5	ERC	N/A	N/A			
SC1718-079	PM10	1	0.2	STERC	2019	9999			
SC1718-080	PM10	1	0.2	ERC	N/A	N/A			
SC1718-081	PM10	7	1.3	STERC	2018	9999			
SC1718-082	PM10	1	0.2	ERC	N/A	N/A			
SC1718-083	PM10	5	0.9	ERC	N/A	N/A			
SC1718-084	PM10	1	0.2	STERC	2018	9999			
SC1718-085	PM10	9	1.6	STERC	2015	9999			
SC1718-086	PM10	3	0.5	ERC	N/A	N/A			
SC1718-087	PM10	7	1.3	ERC	N/A	N/A			
SC1718-088	PM10	9	1.6	ERC	N/A	N/A			
SC1718-089	PM10	0	0.0	STERC	2018	2018			
SC1718-090	PM10	2	0.4	STERC	2019	9999			
SC1718-091	PM10	0	0.0	STERC	2018	2018			
SC1718-092	PM10	4	0.7	STERC	2019	9999			
SC1718-093	PM10	0	0.0	STERC	2018	2018			
SC1718-094	PM10	4	0.7	STERC	2019	9999			
SC1718-095	PM10	4	0.7	ERC	N/A	N/A			
T	Total 90 16.		16.1		N/A				

Table 4: Emission Offset Application Summary – Fiscal Year 2017-18 Sorted by Pollutant and Amount

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT ⁸ (LBS/DAY)	AMOUNT ⁸ (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-096	ROG	0	0	STERC	2017	2017
SC1718-097	ROG	0	0	STERC	2018	2018
SC1718-098	ROG	0	0	STERC	2019	2019
SC1718-099	ROG	0	0	STERC	2020	2020
SC1718-100	ROG	0	0	STERC	2021	2021
SC1718-101	ROG	0	0	STERC	2022	2022
SC1718-102	ROG	0	0	STERC	2023	2023
SC1718-103	ROG	37	6.8	STERC	2024	9999
Te	otal	37	6.8	N/A		

SOUTH COAST AQMD NO.	POLLUTANT	AMOUNT ⁸ (LBS/DAY)	AMOUNT ⁸ (TONS/YR)	ТҮРЕ	START YEAR	END YEAR
SC1718-104	PM10	0	0	STERC	2018	2018
SC1718-105	PM10	0	0	STERC	2019	2019
SC1718-106	PM10	0	0	STERC	2020	2020
SC1718-107	PM10	0	0	STERC	2021	2021
SC1718-108	PM10	0	0	STERC	2022	2022
SC1718-109	PM10	0	0	STERC	2023	2023
SC1718-110	PM10	0	0	STERC	2024	2024
SC1718-111	PM10	15	2.7	STERC	2025	9999
SC1718-112	PM10	0	0	STERC	2018	2018
SC1718-113	PM10	0	0	STERC	2019	2019
SC1718-114	PM10	0	0	STERC	2020	2020
SC1718-115	PM10	0	0	STERC	2021	2021
SC1718-116	PM10	0	0	STERC	2022	2022
SC1718-117	PM10	0	0	STERC	2023	2023
SC1718-118	PM10	0	0	STERC	2024	2024
SC1718-119	PM10	2	0.4	STERC	2025	9999
Te	otal	17	3.1	N/A		

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⁸ Only long term emission offsets, those that have an ending year of 9999, are quantified to avoid over counting.

CHAPTER III FISCAL YEAR 2019-2020 BUDGET

Due to the bulk of these material, Chapter III is available online at https://www.aqmd.gov/docs/default-source/finance-budgets/fy-2019-20/fy2019-20-proposed-budget.pdf. Anyone who would like to obtain a hard copy may do so by contacting South Coast AQMD's Public Information Center at (909)396-2001.

CHAPTER IV CLEAN FUELS PROGRAM 2018 ANNUAL REPORT AND 2019 PLAN UPDATE

Due to the bulk of these material, Chapter IV is available online at https://www.aqmd.gov/docs/default-source/technology-research/annual-reports-and-plan-updates/2018-annual-report-2019-plan-update.pdf. Anyone who would like to obtain a hard copy may do so by contacting South Coast AQMD's Public Information Center at (909)396-2001.

CHAPTER V ANNUAL RECLAIM AUDIT REPORT FOR 2017 COMPLIANCE YEAR

Due to the bulk of these material, Chapter V is available online at http://www.aqmd.gov/docs/default-source/reclaim/reclaim-annual-report/reclaim-2017-audit-report.pdf. Anyone who would like to obtain a hard copy may do so by contacting South Coast AQMD's Public Information Center at (909)396-2001.