REGULATORY AND ENFORCEMENT: SUBCOMMITTEE MEASURES

STATIONARY SOURCES IN STOCKTON

There are a variety of industrial sources located in and around the Stockton Community. These sources range from smaller operations like gasoline dispensing facilities (GDFs), commercial cooking operations, and auto body coating operations to medium sized operations like wood products and agricultural products processing operations, to larger operations like the biomass power facility, bulk gasoline storage, and cement and concrete products facilities; which include equipment like ovens, internal combustion (IC) engines, boilers/steam generators, and many others.

Criteria pollutant emissions from this source category include NOx, SOx, PM10/PM2.5, CO, and VOC, and toxic air contaminants (TACs) like benzene, toluene, xylene, arsenic, and dioxins. Within the Stockton community, 161.57 tons per year of NOx, 210.08 tons per year of VOC and 7.93 tons per year of PM2.5 are attributed to stationary sources.

COMMUNITY CONCERNS AND COMMENTS

During committee discussions regarding industrial sources, committee members identified commercial cooking operations, a wood products manufacturing facility, a biomass facility, a cement products processing facility, and visible dust emissions and odors from operations in and around the port as sources of concern, with suggestions ranging from providing "incentives" to replace older, higher polluting equipment and the evaluation of existing state and District regulatory measures.

CURRENT CONTROL PROGRAMS

For more than 25 years, the District has implemented several generations of emissions control regulations for stationary and area sources under its regulatory jurisdiction. These control measures represent the nation's toughest air pollution regulations and have greatly contributed to reducing ozone and particulate matter concentrations in the Valley. Stringent and innovative rules, such as those for indirect source review, residential wood burning, glass manufacturing, and agricultural burning, have set benchmarks for California and the nation. While there has been significant progress in reducing air pollution with these regulations, which have been greatly aided by the pollution reduction efforts and financial investments of valley businesses and residents, the District continues to adopt and modify rules to achieve ongoing emissions reductions and advance our progress toward clean air.

Gasoline Dispensing Facilities (GDFs):

Gasoline dispensing facilities in the San Joaquin Valley are subject to District Rule 4621 – Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants and Rule 4622 – Gasoline Transfer Into Motor Vehicle Fuel Tanks.

The purpose of Rule 4621 is to limit VOC emissions from stationary storage containers, delivery vessels, and bulk plants. This rule applies to gasoline storage containers with capacities greater than 250 gallons and has requirements to install CARB certified

vapor control systems. The purpose of Rule 4622 is to limit emissions of gasoline vapors from the transfer of gasoline into motor vehicle fuel tanks. This rule applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks. This rule also requires the installation of CARB certified vapor control systems. GDFs are subject to stringent enforcement provisions, including ongoing monitoring of equipment and annual inspections.

Commercial Cooking Operations:

Commercial cooking operations are subject to Rule 4692 – *Commercial Charbroiling* and District Rule 4693 – *Bakery Ovens*. The purpose of Rule 4692 is to limit VOC and PM10 emissions from charbroiling cooking operations. The purpose of Rule 4693 is to limit VOC emissions from the baking of yeast-leavened food products. These rules have very stringent emission limits, periodic monitoring, and source testing requirements.

Commercial cooking operations are subject to stringent enforcement provisions, including ongoing recordkeeping of materials processed and regular inspections.

Auto Body Coating Operations:

Auto body coating operations in the San Joaquin Valley are subject to District Rule 4612 – *Motor Vehicle and Mobile Equipment Coating Operations* and Rule 4101 – *Visible Emissions.*

The purpose of Rule 4612 is to limit VOC emissions from the coating of motor vehicles, mobile equipment, associated parts and components, and associated organic solvent cleaning, storage, and disposal. This rule applies to any person who supplies, sells, offers for sale, manufacturers, or distributes any automotive coating for use within the District, as well as any person who uses, applies, or solicits the use or application of any automotive coating within the District. The rule requires the sale and use of low VOC coatings and solvents, in addition to stringent requirements for the application of these coatings. Auto body coating operations are subject to stringent enforcement provisions, including ongoing recordkeeping of coatings/solvents used and regular inspections. They also must demonstrate continued compliance with additional visible emissions requirements as described in Rule 4101.

Wood Products Processing Operations:

Wood products processing operations are subject to Rule 4101 – Visible Emissions, Rule 4201 – Particulate Matter Concentration, Rule 4202 – Particulate Matter – Emission Rate, Rule 4306/4320 – Boilers, Steam Generators, and Process Heaters, and District Rule 4702 – Internal Combustion Engines. The purpose of Rules 4101, 4201, and 4202 is to limit particulate matter emissions from exhaust stacks and industrial processes. The purpose of Rules 4306, 4320, and 4702 is to limit emissions of NOx, CO, VOC, SOx, and PM10 from fossil fuel combustion in boilers, steam generators, process heaters, and stationary internal combustion engines commonly used in these types of facilities. These rules have very stringent emission limits, periodic monitoring, and source testing requirements. Wood products processing facilities are subject to stringent enforcement provisions, including ongoing recordkeeping of materials processed and regular inspections.

Agricultural Products Processing Operations:

Agricultural products processing operations are subject to Rule 4101 – *Visible Emissions*, Rule 4201 – Particulate Matter Concentration, Rule 4202 – *Particulate Matter – Emission Rate, and* Rule 4306/4320 – *Boilers, Steam Generators, and Process Heaters*. The purpose of Rules 4101, 4201, and 4202 is to limit particulate matter emissions from exhaust stacks and both indoor and outdoor industrial processes. The purpose of Rules 4306 and 4320 is to limit emissions of NOx, CO, SOx, and PM10 from natural gas combustion in boilers, steam generators, and process heaters. These rules have very stringent emission limits, periodic monitoring, and source testing requirements.

Agricultural products processing facilities are subject to stringent enforcement provisions, including ongoing recordkeeping of materials processed and annual inspections.

Cement and Concrete Products Operations:

Cement and concrete processing operations are subject to Rule 4101 – *Visible Emissions*, Rule 4201 – Particulate Matter Concentration, and Rule 4202 – *Particulate Matter – Emission Rate.* The purpose of Rules 4101, 4201, and 4202 is to limit particulate matter and visible emissions from exhaust stacks, process equipment, and conveying equipment. These rules have very stringent emission limits, periodic monitoring, and source testing requirements.

Cement and concrete products processing facilities are subject to stringent enforcement provisions, including ongoing recordkeeping of materials processed and annual inspections.

Biomass Power Facilities:

Biomass power facilities in the San Joaquin Valley are subject to District Rule 4352 – Solid Fuel Fired Boilers, Steam Generators, and Process Heaters and Rule 4101 – Visible Emissions.

The purpose of Rule 4352 is to limit emissions of NOx and CO from solid fuel fired boilers, steam generators and process heaters. This rule applies to any boiler, steam generator or process heater fired on solid fuels, such as biomass. This rule has very stringent emission limits, periodic monitoring, and source testing requirements. Biomass power facilities are subject to stringent enforcement provisions, including ongoing recordkeeping of materials burned and annual inspections. These facilities must demonstrate continued compliance with additional visible emissions requirements as described in Rule 4101.

Organic Liquid (Gasoline) Terminal Facilities:

Bulk gasoline terminal facilities in the San Joaquin Valley are subject to District Rule 4623 – *Storage of Organic Liquids* and Rule 4624 – *Organic Liquid Loading*.

The purpose of Rule 4623 is to limit VOC emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored. The purpose of Rule 4624 is to limit VOC emissions from the transfer of organic liquids. This rule applies to organic liquid transfer facilities. Facilities that store or transfer organic liquids, such as gasoline pipeline terminals are subject to stringent enforcement provisions, including quarterly leak inspection requirements and annual inspections.

STRATEGIES DEVELOPED FOR IMPLEMENTATION IN THE COMMUNITY

Due to the priority that community members placed on reducing PM2.5 and toxic air contaminant emissions that originate from industrial sources in and around the community, the following strategies have been developed for implementation in the Stockton community.

The following are proposed measures that are within the Air District's statutory jurisdiction to implement:

SS.1: ENHANCED STATIONARY SOURCE INSPECTION FREQUENCY

Overview: The goal of this strategy is to limit the potential for localized air quality impacts at permitted facilities that have had emissions violations in the last three years.

The District conducts inspections and investigations of permitted sources to determine compliance with a multitude of health-protective local, state, and federal air quality regulations that target both criteria and toxic pollutants. The District closely monitors these sources and strictly enforces applicable requirements. Compliance inspections are unannounced whenever possible and involve both a physical inspection of the facility and a review of their records. When a violation of a District permit, rule, or regulation is identified, the District takes an appropriate level of enforcement action.

The District reviewed the enforcement history over a three year period (2017-2020) for the permitted facilities in the Stockton community, and determined that 51 enforcement actions were issued to facilities (not including gas stations) for violations resulting in excess emissions. These violations occurred at 13 permitted facilities in the area and 1 ocean-going vessel. The District also issued 18 enforcement actions at 14 gas stations in the Stockton community for violations resulting in excess emissions. The District also issued 18 enforcement actions at 14 gas stations in the Stockton community for violations resulting in excess emissions. The District believes that more frequent inspections for these 27 facilities would help to limit the potential for air quality impacts associated with emissions violations.

The District will increase the frequency of inspection at each facility within the Stockton community that has had an emission-based violation over the past three (3) years. These facilities will be inspected at least twice per calendar year for the next five (5)

years or until the facility has four (4) consecutive inspections without an emissions violation, whichever occurs first.

Implementing Agency: SJVAPCD

Strategy Type: Enforcement

Quantifiable Emission Reductions: Reduction in excess PM2.5, PM10, NOx, VOC, and CO emissions through higher compliance rates

SS.2: REGULATORY ACTIONS: EVALUATION OF RULES TO DETERMINE WHETHER ADDITIONAL REDUCTIONS ARE POSSIBLE FOR SOURCES OF NOX AND PM2.5

Overview: In addition to the Best Available Retrofit Control Technology (BARCT) implementation schedule above, the District will be analyzing District Rule 4352 - *Solid Fuel-Fired Boilers, Steam Generators and Process Heaters* to pursue additional emission reduction opportunities beyond BARCT. This rule amendment will be reviewed on the schedule included in the District's *2018 PM2.5 Plan* adopted by CARB into the State Implementation Plan.

Emissions reductions achieved through the implementation of more stringent limits potentially required through these rule amendments will further contribute to reduced exposure to air pollution in the community. Community Steering Committee members, members of the AB 617-selected community, and the general public are encouraged to be involved in the upcoming rulemaking process for these rules.

Implementing Agency: SJVAPCD

Strategy Type: Regulatory

Quantifiable Emission Reductions: Potential reductions through the implementation of additional regulatory requirements as feasible.

SS.3: REGULATORY ACTIONS: EXPEDITED FACILITY RISK ASSESSMENT AND RISK REDUCTION UNDER DISTRICT IMPLEMENTATION OF THE AIR TOXICS HOT SPOTS INFORMATION AND ASSESSMENT ACT (AB 2588)

Overview: This strategy will expedite the review of stationary sources of pollution in the community that are currently being reassessed under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588).

Under AB 2588, all facilities located within the boundaries of the District are required to report toxic substances released into the air by their operation to the District. The District's responsibilities under the state's Air Toxics "Hot Spots" program are to:

• Identify Valley facilities that release toxic air contaminants as a result of their day

to day operations,

- Collect and quantify emission data from equipment located at permitted facilities,
- Identify facilities causing localized health impacts on nearby residents,
- Determine facility-wide health risks resulting from the emission of toxic air contaminants,
- Notify nearby residents and businesses of significant risk facilities in their vicinity, and
- Require that significant risk facilities reduce their risks to a level that no longer constitutes a significant risk to nearby residences and businesses.

The District's implementation of AB 2588, California's Air Toxics "Hot Spots" Information and Assessment Act, has resulted in major reductions in emissions of air toxics from existing sources in the San Joaquin Valley. Under this right-to-know law, the District has worked with Valley facilities to quantify emissions of air toxics, determine the health risk caused by those emissions, report emissions and any significant risks through written public reports and neighborhood public meetings, and take steps to reduce such risks.

This measure will result in the expedited AB 2588 reviews for facilities located within the Stockton AB 617 Community. More information about this effort can be found later in the section, "Additional Regulatory Measures to Reduce Emissions in the Community." Please refer to Appendix E for additional details about the District's Health Risk Assessment Process, and a table identifying the AB 2588 reassessment status of each facility within the community as of December 21, 2020.

Implementing Agency: SJVAPCD

Strategy Type: Regulatory

Quantifiable Emission Reductions: Ongoing review of air toxics risk and mitigation under AB 2588 program.

STATEWIDE INCENTIVE AND REGULATORY STRATEGIES

This section provided by the California Air Resources Board

Overview of California Air Resources Board's Statewide Actions

Community-scale air pollution exposure is caused by many factors, including the cumulative impacts from multiple pollution sources. Effective solutions require multiple strategies at both the statewide and local level to deliver new emissions reductions directly within these communities.

The California Air Resources Board (CARB) has adopted a number of comprehensive air quality and climate plans over the last several years that lay out new emissions reduction strategies. These plans include the State Strategy for the State Implementation Plan,⁸ the California Sustainable Freight Action Plan,⁹ California's 2017 Climate Change Scoping Plan,¹⁰ and the Short-Lived Climate Pollutants Reduction Strategy,¹¹ along with a suite of incentive programs. The Community Air Protection Blueprint¹² further identified additional actions to reduce the air pollution burden in heavily impacted communities throughout the State. Together, these plans provide a foundation for the new actions identified as part of this community emissions reduction program.

This section illustrates CARB's statewide role in the community emissions reduction program, by broadly describing the regulatory and incentive-based foundational actions CARB has taken to reduce emissions statewide. It also highlights specific actions that address areas of concern identified by the Stockton community. CARB's potential enforcement strategies are described in Chapter 5 of this CERP.

 ⁸ California Air Resources Board, *Revised Proposed 2016 State Strategy for the State Implementation Plan*, March 7, 2017, available at: https://ww3.arb.ca.gov/planning/sip/2016sip/rev2016statesip.pdf.
⁹ California Department of Transportation, *California Sustainable Freight Action Plan*, July 2016, available

at: <u>https://dot.ca.gov/programs/transportation-planning/freight-planning/california-sustainable-freight-</u> action-plan.

¹⁰ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017, available at: <u>https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan</u>.

¹¹ California Air Resources Board, *Short-Lived Climate Pollutant Reduction Strategy*, March 2017, available at: <u>https://ww2.arb.ca.gov/resources/documents/slcp-strategy-final.</u>

¹² California Air Resources Board, *Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring,* October, 2018, available at: <u>https://ww2.arb.ca.gov/capp-blueprint</u>.

• Ensuring transparency for communities regarding projects funded, dollars spent, and benefits expected

For more information on air pollution incentives, grants, and credit programs, visit: <u>https://ww2.arb.ca.gov/our-work/topics/incentives</u>.

REGULATORY PROGRAMS

Federal, State, and local air quality agencies all work together to reduce emissions. At the federal level, the U.S. Environmental Protection Agency (U.S. EPA) has primary authority to control emissions from certain mobile sources, including sources that are all or partly under federal jurisdiction (e.g., some farm and construction equipment, aircraft, marine vessels, locomotives), which it shares in some cases with air districts and CARB. The U.S. EPA also establishes ambient air quality standards for some air pollutants.

At the State level, CARB is responsible for controlling emissions from mobile sources and consumer products (except where federal law preempts CARB's authority), controlling toxic emissions from mobile and stationary sources, controlling greenhouse gases from mobile and stationary sources, developing fuel specifications, and coordinating State-level air quality planning strategies with other agencies.

Regionally, air districts are primarily responsible for controlling emissions from stationary and indirect sources (with the exception of consumer products in most cases) through rules and permitting programs within their regions.

CARB regulatory programs are designed to reduce emissions to protect public health, achieve air quality standards, reduce greenhouse gas emissions, and reduce exposure to toxic air contaminants. CARB establishes regulatory requirements for cleaner technologies (both zero and near-zero emissions) and their deployment into the fleet, for cleaner fuels, and to ensure in-use performance. CARB's regulatory programs are broad – impacting stationary sources, mobile sources, and multiple points within product supply chains from manufacturers to distributors, retailers, and end-users. CARB's regulations affect cars, trucks, ships, off-road equipment, consumer products, fuels, and stationary sources.

One important and relevant regulatory authority of CARB's is to adopt measures to reduce emissions of toxic air contaminants from mobile and non-mobile sources, known as Airborne Toxic Control Measures (ATCM).¹⁹ These regulatory measures include process requirements, emissions limits, or technology requirements. Additionally, the Statewide Air Toxics "Hot Spots" Program²⁰ addresses the health risk from toxic air

¹⁹ California Health and Safety Code § 39650 et seq.

²⁰ Assembly Bill 2588, Air Toxics "Hot Spots" Information and Assessment Act, Connelly, Statutes of 1987, California Health and Safety Code § 44300 et seq.

contaminants at individual facilities across the State. The Air Toxics "Hot Spots" Program includes several components to collect emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels.

Under the Air Toxics "Hot Spots" Program, air districts are required to set a threshold for facilities that pose a significant health risk and prioritize facilities for health risk assessments. Air districts also establish a risk value above which facilities must conduct a risk reduction audit and emissions reduction plan. Facilities must develop these health risk assessments, risk reduction audits, and emission reduction plans. CARB provides technical guidance to support smaller businesses conducting health risk assessments and developing emissions reduction plans.

Additionally, in some instances CARB has pursued enforceable agreements with industry that result in voluntary but enforceable adoption of the cleanest technologies or practices and provide assurance that emissions reductions will be realized. CARB's agreement with the Union Pacific Railroad Company and BNSF Railway Company to accelerate introduction of cleaner locomotives in the South Coast Air Basin is an example of an enforceable agreement.

CARB ACTIONS RELATED TO THE STOCKTON COMMUNITY

This section highlights CARB actions that specifically relate to the Stockton community. This list should not be interpreted as comprehensive or exhaustive, but rather illustrative of some of the major statewide strategies driving emissions reductions in conjunction with those local level strategies identified in this community emissions reduction program. Additional CARB foundational strategies can be found in Appendix D and Appendix F of the Community Air Protection Blueprint.²¹

Recently Adopted CARB Regulations

CARB adopted the **Advanced Clean Trucks Rule**²² in June 2020 requiring truck manufacturers to transition from producing diesel trucks and vans to electric zeroemission trucks including heavy-duty vehicles beginning in 2024. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales will need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. This rule also requires that fleets report information on a one-time basis about their vehicles to support future zero-emission fleet rules.

 ²¹ California Air Resources Board, *Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring*, October, 2018, available at: <u>https://ww2.arb.ca.gov/capp-blueprint.</u>
²² For more information on the Advanced Clean Trucks Rule, visit: <u>https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks</u>.

In August 2020 CARB adopted the **Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments**²³ which require manufacturers to comply with tougher emissions standards, overhaul engine testing procedures, and further extend engine warranties to ensure that emissions of NO_x (oxides of nitrogen, a key component of smog) are reduced to help California meet federal air quality standards and critical public health goals. The regulation is expected to have a significant impact on communities adjacent to railyards, ports and warehouses that typically experience heavy truck traffic. These trucks often idle, move slowly and make frequent stops – all actions that increase NOx emissions. Today's heavy-duty trucks do not control NOx effectively during such "low load" conditions. The new standards will reduce NOx emissions by 90 percent or more when trucks are operating under these low load realworld operations. All components of the new rule will be phased-in, allowing engine manufacturers time to prepare for compliance. The NOx standards that engines must meet will be cut to approximately 75 percent below current standards beginning in 2024, and 90 percent below current standards in 2027.

The **Control Measure for Ocean-Going Vessels At Berth**²⁴ was also adopted in August 2020 and is an updated version of the CARB's At-Berth Regulation that supersedes the existing At-Berth Regulation, as specified, and is designed to achieve further emissions reductions from vessels at berth to improve air quality in communities surrounding ports and terminals throughout California. Emissions reductions will be achieved through the inclusion of new vessel categories (such as vehicle carriers and tanker vessels), new ports, and independent marine terminals, and through updated control requirements, among other provisions.

Upcoming CARB Regulations

Commercial Harbor Craft Regulation Amendments – CARB's existing commercial harbor craft regulation was adopted in 2007 and will be fully implemented by the end of 2022. CARB is working through a public process to consider additional amendments that may further reduce emissions and pursue more stringent in-use standards, with consideration for Tier 4 engine technology and near-zero and zero emission technologies. For more information on the regulation and potential new regulatory concepts, visit: <u>https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft.</u>

Heavy-Duty Vehicle Inspection and Maintenance – When emissions control systems are not operating correctly, in-use emissions can increase. CARB's current inspection programs include the roadside Heavy-Duty Vehicle Inspection Program and the fleet

²⁴ For more information on the Control Measure for Ocean-Going Vessels At Berth, see: <u>https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation</u>, and the At Berth Factsheet: <u>https://ww2.arb.ca.gov/sites/default/files/2020-08/External%20At-Berth%20Fact%20Sheet%20August%202020%20ADA_0.pdf</u>

²³ For more information on the Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments, visit: <u>https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox</u>

Periodic Smoke Inspection Program. These regulations require heavy-duty vehicles operating in California be inspected for excessive smoke and tampering. In July 2018, CARB approved amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program to reduce the smoke opacity limits to levels more appropriate for today's modern engine technology. CARB is now exploring the development of a more comprehensive heavy-duty inspection and maintenance program that would help ensure all vehicle emissions control systems are maintained adequately throughout the vehicles' operating lives. For more information on existing heavy-duty maintenance programs, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-diesel-inspection-periodic-smoke-inspection-program. For more information on the development of a comprehensive heavy-duty inspection and maintenance program, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-diesel-inspection-periodic-smoke-inspection-program. For more information on the development of a comprehensive heavy-duty inspection and maintenance program, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-diesel-inspection-periodic-smoke-inspection-program. For more information on the development of a comprehensive heavy-duty inspection and maintenance program, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program.

Cargo Handling Equipment Regulation Amendments – Mobile cargo handling equipment is any motorized vehicle used to handle cargo or perform routine maintenance activities at California's ports and intermodal rail yards. The type of equipment includes yard trucks (hostlers), rubber-tired gantry cranes, container handlers, forklifts, etc. The Mobile Cargo Handling Equipment (CHE) Regulation was adopted in 2005 to reduce toxic and criteria emissions to protect public health and was fully implemented by the end of 2017. CARB staff is currently assessing the availability and performance of zero-emission technology to further reduce emissions. For more information on the regulation, visit: <u>https://ww2.arb.ca.gov/our-work/programs/cargohandling-equipment</u>.

Advanced Clean Fleet Rules – CARB is developing a medium and heavy-duty zeroemission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications. For more information, visit: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets.

Transport Refrigeration Unit Regulations – Transport refrigeration units congregate at distribution centers, railyards, and other facilities, resulting in the potential for health risks to those that live and work nearby. CARB is working through a public process to consider new requirements to transition the transport refrigeration units fleet to zero emission operations by requiring both zero emission technology and supporting infrastructure. For more information on this new regulation, visit: <u>https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation</u>.

Small Off-Road Engines – In 2020, CARB will consider new standards for small offroad engines (SORE), which are spark-ignition engines rated at or below 19 kilowatts and used primarily for lawn, garden, and other outdoor power equipment. For more information on the strategy, visit:

https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore

Advanced Clean Cars II – CARB staff is developing the Advanced Clean Cars II regulations, which will seek to reduce criteria and greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year, and increase the number of zero emission vehicles for sale. For more information on these new regulations, visit: <u>https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program</u>.

Commercial Cooking Suggested Control Measure – This strategy consists of a twophase process to evaluate California's current emission reduction requirements for commercial cooking operations that prepare food for human consumption, and if necessary, make improvements to achieve additional reductions in particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM2.5) and volatile organic compound emissions that contribute to ozone formation. For more information on the strategy, visit: <u>Blueprint Appendix F</u> – pages F-8 & F-9.

ESTIMATED EMISSIONS REDUCTIONS FROM CARB MEASURES

CARB has estimated the emissions reduction benefits for some of the proposed statewide measures as shown in Table 4-3 for the 2025 and 2030 milestone years for the Stockton Community. Note the emissions reductions from the recently adopted Ocean-Going Vessels At Berth Amendment and Low NOx Omnibus Regulation are not reflected in the emissions inventory presented in Chapter 3 or Appendix C.

Table 4-3Estimated Emissions Reductions from CARB Measures in theStockton Community

Proposed Statewide Measures	Emissions Reduction (tons per year)							
	PM2.5		DPM		NOx		VOC	
	2025	2030	2025	2030	2025	2030	2025	2030
Ocean-Going Vessels At Berth Amendment	0.00	0.18	0.00	0.20	0.00	11.45	0.00	0.56
Advanced Clean Car 2		0.02		0.00		1.00		0.38
Heavy-Duty Inspection and Maintenance	0.34	0.38	0.35	0.40	23.25	27.7		
Low NOx Engine Standard					1.88	14.17		
Small Off-Road Engine Amendment	0.15	0.92	0.12	0.28	17.03	27.09	8.28	28.31