

August 12, 2019

Mr. Mike Stoker
Regional Administrator
Region 9
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Dear Mr. Stoker:

The California Air Resources Board (CARB) is providing this letter to the U.S. Environmental Protection Agency (U.S. EPA) to supplement and clarify some values in the *2017 Quantitative Milestone Report for the 1997 and 2006 NAAQS (2017 Report)* for the San Joaquin Valley, originally transmitted to you on December 20, 2018.

The 2017 Report documents implementation of CARB and San Joaquin Valley Air Pollution Control District (District) rules that provided the emissions reductions needed to meet the 2017 reasonable further progress (RFP) emissions targets, and also demonstrates that the 2017 quantitative milestones have been met. As part of their review of the 2017 Report, U.S. EPA staff requested that CARB and the District provide supplementary and clarifying information pertaining to CARB and District milestones. This information is provided in the Attachment. The District provided the information related to their milestones.

If you have any questions, please contact Dr. Michael Benjamin, Chief, Air Quality Planning and Science Division, at (916) 201-8968, or by email at michael.benjamin@arb.ca.gov.

Sincerely,



Richard W. Corey
Executive Officer

Attachment

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cc: Mr. Samir Sheikh
Executive Director/Air Pollution Control Officer
San Joaquin Valley Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, California 93726-0244

Ms. Elizabeth Adams
Director
Region 9, Air and Radiation Division
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Dr. Michael T. Benjamin, Chief
Air Quality Planning and Science Division
California Air Resources Board

Attachment: Supplemental Information and Clarifications to 2017 Quantitative Milestones

District Milestone 1. Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters) Regulation Requirements from 2014 through 2017

The District's Wood-Burning Fireplaces and Wood-Burning Heaters Rule is designed to achieve PM_{2.5} reductions. PM_{2.5} emissions¹ from wood-burning devices covered by the Rule² were 6.35 tons per day (tpd) in 2013 (winter average emissions)³ and had decreased to 5.49 tpd in 2017 (winter average emissions), a reduction of 0.86 tpd or 14 percent. The Wood-Burning Fireplaces and Wood-Burning Heaters Rule provided a significant portion of these reductions. In addition, the District amended Rule 4901 on June 20, 2019 to further reduce emissions from wood-burning fireplaces and wood-burning heaters.

District Milestone 2. Rule 4308 (Boilers, Steam Generators, and Process Heaters [0.075 to <2 MMBtu/hr]) Regulation Requirements from 2015 through 2017

The District's Boilers, Steam Generators, and Process Heaters (0.075 to <2 MMBtu/hr) Rule is designed to achieve reductions of NO_x. NO_x emissions from units covered by the Rule² were 0.86 tpd in 2013 and had decreased to 0.69 tpd in 2017, a reduction of 0.17 tpd or 17 percent. The Boilers, Steam Generators, and Process Heaters (0.075 to <2 MMBtu/hr) Rule provided a significant portion of these reductions.

District Milestone 4. Rule 4354 (Glass Melting Furnaces) Regulation Requirements from 2013 through 2017

The District's Glass Melting Furnaces Rule is designed to achieve reductions of NO_x and PM₁₀. NO_x emissions from glass melting furnaces covered by the Rule² were 6.21 tpd in 2013 and had decreased to 3.26 tpd in 2017, a reduction of 2.95 tpd or 48 percent. PM₁₀ emissions from the same sources were 0.44 tpd in 2013 and 0.21 tpd in 2017, a 0.23 tpd or 52 percent reduction. PM_{2.5} emissions from the same sources were 0.34 tpd in 2013 and 0.18 tpd in 2017, a 0.16 tpd or 53 percent reduction. The Glass Melting Furnaces Rule provided a significant portion of these reductions.

District Milestone 5. Rule 4702 (Internal Combustion Engines) Regulation Requirements from 2013 through 2017

The District's Internal Combustion Engines Regulation requirements are designed to achieve NO_x reductions. NO_x emissions from internal combustion engines covered by the Regulation requirements² were 12.94 tpd in 2013 and had decreased to 6.89 tpd in 2017, a

¹ Emissions inventory data are from the inventory developed for the *2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards* (2018 PM_{2.5} SIP): the California Emission Projection Analysis Model (CEPAM) 2016 Ozone SIP Version 1.05. See 2018 PM_{2.5} Plan Appendix B for documentation of inventory methodology.

² See 2018 PM_{2.5} Plan Appendix C, Table C.26, for a list of Emission Inventory Codes (EICs) under the control measure.

³ The 2017 Report addresses the 1997 and 2006 24-hour standards and the 1997 annual standard. In the 2017 Report, and in this attachment, unless otherwise stated, emissions are on an annual average basis since the 1997 annual standard is viewed as controlling in the sense that the control strategy in the 2018 PM_{2.5} Plan which provides for attainment of the 1997 annual standard also provides sufficient emission reductions for attainment of the 1997 24-hour standard and reasonable further progress towards attaining the 2006 24-hour standard.

reduction of 6.05 tpd or 47 percent. The Internal Combustion Engines Regulation requirements provided a significant portion of these reductions.

District Milestone 6. Rule 4902 (Residential Water Heaters) Regulation Requirements from 2013 through 2017

The District's Residential Water Heater Rule is designed to achieve NO_x reductions. NO_x emissions from residential water heaters covered by the Rule requirements² were 2.15 tpd in 2013 and had decreased to 2.07 tpd in 2017, a reduction of 0.08 tpd or 4 percent. The Residential Water Heater Rule requirements provided a significant portion of these reductions.

CARB Milestone 1. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation Requirements from 2013 through 2017

The On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation (Truck and Bus Regulation) is designed to achieve reductions of both NO_x and PM_{2.5}. NO_x emissions from vehicles regulated by the Truck and Bus Regulation were 128.7 tpd in 2013 and had decreased to 82.2 tpd in 2017, a reduction of 46.5 tpd or 36 percent. PM_{2.5} emissions from the same vehicle categories were 4.1 tpd in 2013 and 1.4 tpd in 2017, a 2.7 tpd or 67 percent reduction. The Truck and Bus Regulation provided a significant portion of these reductions.

CARB Milestone 2. Advanced Clean Cars Program Requirements from 2014 through 2017

The Advanced Clean Cars Program, and the Low Emission Vehicle III (LEV III) regulation portion of the program in particular, is designed to achieve NO_x reductions. NO_x emissions from vehicles regulated by the LEV III regulation were 29.7 tpd in 2014 and had decreased to 21.2 tpd in 2017, a reduction of 8.5 tpd or 29 percent. The LEV III regulation provided a significant portion of these reductions.

CARB Milestone 3. In-Use Off-Road Diesel-Fueled Fleets Regulation Requirements from 2014 through 2017

The In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) is designed to achieve reductions of both NO_x and PM_{2.5}. NO_x emissions from vehicles regulated by the Off-Road Regulation were 13.7 tpd in 2014 and about one one-hundredth of a ton less per day in 2017, about a 0.1 percent reduction. PM_{2.5} emissions from the same vehicle categories were about 0.59 tpd in 2014 and about one one-hundredth of a ton less per day in 2017, about a 1.6 percent reduction. The Off-Road Regulation provided a significant portion of these reductions.