

APPENDIX E

Approved Waivers



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

OCT 29 2019

Dr. Matt Miyasato, Deputy Executive Officer
Science and Technology Advancement
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765-4178

Dear Dr. Miyasato:

Thank you for your submission of the South Coast Air Quality Management District (SCAQMD) *Annual Air Quality Monitoring Network Plan* on June 26, 2019. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this plan approval, we also formally approve an FEM waiver for the following sites, for the time periods specified in Enclosure B to this letter: Central Los Angeles (Main St.) (AQS ID: 06-037-1103-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008-3), and Ontario Route 60 (AQS ID: 06-071-0027-3). Please include this waiver approval with next year's network plan. Also, per 40 CFR part 58 Appendix D, section 4.8.2(e), we formally approve the PAMS meteorological waiver request for collecting upper air meteorological and precipitation measurements from locations other than the Los Angeles (Main St.) and Rubidoux NCore sites. Upper air measurements will be collected at the Los Angeles International Airport (LAX) and the Ontario International Airport (ONT); precipitation measurements will be collected by the National Weather Service (NWS) and Federal Aviation Administration (FAA) at Downtown Los Angeles (USC) and Riverside Municipal Airport (RAL).

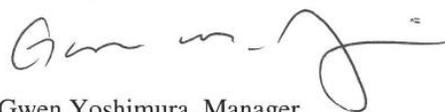
Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. The first enclosure (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Items highlighted in green in Enclosure A require attention in order to improve next year's plan.

All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

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If you have any questions regarding this letter or the enclosed comments, please feel free to contact me at (415) 947-4134 or Jennifer Williams (213) 244-1824.

Sincerely,



Gwen Yoshimura, Manager
Air Quality Analysis Office

Enclosures:

- A. Annual Monitoring Network Plan Checklist
- B. Approval of SCAQMD Request for PM_{2.5} FEM Waiver

cc (via email): Jason Low, SCAQMD
Rene Bermudez, SCAQMD
Jin Xu, California Air Resources Board (CARB)
Kathy Gill, CARB
Michael Miguel, CARB
Michael Werst, CARB
Sylvia Vanderspek, CARB
Webster Tasat, CARB

B. Approval of the SCAQMD Request for PM_{2.5} FEM Waiver

In the 2019 annual network plan for SCAQMD, your agency requested EPA’s approval to consider the 2016-2018 PM_{2.5} data from your continuous federal equivalent method (FEM) monitors at the following sites as not eligible for comparison to the NAAQS: Central Los Angeles/Los Angeles (Main St.) (AQS ID: 06-037-1103-9), Rubidoux (AQS ID: 06-065-8001-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008-3), and Ontario Route 60 (AQS ID: 06-071-0027-3). This enclosure is in response to your request and approves the monitors listed in the table below for the specified dates as not eligible for comparison to the NAAQS (i.e., provides a waiver for NAAQS comparability). EPA is not approving the request for the Rubidoux (AQS ID: 06-065-8001-9) monitor as this monitor is eligible for comparison to the NAAQS.

According to 40 CFR 58.11(e), in order to be considered not eligible for comparison to the NAAQS, continuous FEM PM_{2.5} data must be shown to not meet the criteria in 40 CFR 53 Table C-4. These criteria describe the maximum allowable multiplicative and additive bias between filter-based federal reference method (FRM) PM_{2.5} monitor and a Class III continuous FEM PM_{2.5} monitor operating at the same site. EPA based its evaluation on the criteria in 40 CFR 53 as described by our memo dated April 20, 2013 and its attached document titled, “Instructions and Template for Requesting that data from PM_{2.5} Continuous FEMs are not compared to the NAAQS.”

We reviewed your request for 2016-2018 data and have determined that the following monitors do not meet the bias criteria in 40 CFR 53 and are approved as not eligible for comparison to the NAAQS for the noted time periods:

Site Name	AQS ID-Parameter Code-POC	Begin Date	End Date
Central Los Angeles (Main St.)	06-037-1103-9	01/01/2016	12/31/2018
Mira Loma	06-065-8005-3	01/01/2016	12/31/2018
Long Beach Route 710	06-037-4008-3	01/01/2016	12/31/2018
Ontario Route 60	06-071-0027-3	08/01/2016	12/31/2018

Your request stated that you consider the continuous PM_{2.5} data of sufficient quality to report to the AQI and will be submitting the data to AIRNow. As such, it is appropriate to submit the data from the monitors and dates in the table above to AQS under the parameter code 88502.

In providing the waiver for the data in the timeframes listed above, EPA expects that SCAQMD will continue to work to improve the comparability of the continuous PM_{2.5} FEM monitors and their filter-based monitors. If SCAQMD intends to submit data from these monitors under a parameter code other than 88101, an updated analysis of the bias for each FEM monitor should be included in future annual network plans for a renewed waiver approval.

In addition, since the intent of such a waiver is to allow more time for method and operational improvements to meet the required bias, SCAQMD must develop a performance assessment and improvement plan to be approved by EPA that describes how the agency will track the

performance of these monitors on a quarterly or more frequent basis, as well as the activities SCAQMD intends to take to address any continuing performance issues.

Although the Rubidoux monitor did not pass the correlation of reference method and method measurements test of ≥ 0.95 for a $CCV \geq 0.5$, this monitor met the bias criteria in 40 CFR 53 and is eligible for comparison to the NAAQS for the time period of 01/01/2016 – 12/31/2018.

According to 40 CFR 58.11(e)(6):

The key statistical metric to include in an assessment is the bias (both additive and multiplicative) of the $PM_{2.5}$ continuous FEM(s) compared to a collocated FRM(s). Correlation is required to be reported in the assessment, but failure to meet the correlation criteria, by itself, is not cause to exclude data from a continuous FEM monitor.

As such, it is appropriate to submit the data from the Rubidoux monitor and specified dates above to AQS under the parameter code 88101.

Your request also noted that the $PM_{2.5}$ FEM datasets for Anaheim (AQS ID: 06-059-0007-3) and South Long Beach (AQS ID: 06-037-4004-3) now pass bias requirements to be included in the NAAQS and will be reclassified in AQS from 88502 in AQS to 88101 for the applicable time period. EPA agrees with these reclassifications.

EPA Evaluation of the Request for Exclusion of PM_{2.5} Continuous FEM Data

2016-2018

Site Name	Site ID	Cont POC	Method Description	PM _{2.5} Cont. Analysis Begin Date	PM _{2.5} Cont Analysis End Date	Continuous/ FRM Sampler pairs per season	Slope (m)	Intercept (y)	Meets bias requirement	Correlation (r)
<i>Sites with PM_{2.5} continuous FEMs that are collocated with FRMs:</i>										
Central Los Angeles (Main St.)	06-037-1103	9	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 238 Spring = 264 Summer = 261 Fall = 269 Total = 1032	1.07	2.65	No	0.94
Rubidoux	06-065-8001	9	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 246 Spring = 257 Summer = 262 Fall = 264 Total = 1029	1.02	1.09	Yes	0.94
Mira Loma	06-065-8005	3	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 231 Spring = 244 Summer = 260 Fall = 251 Total = 986	0.95	2.71	No	0.95
Long Beach Route 710	06-037-4008	3	Thermo BAM 5014i w/VSCC	01/01/2016	12/31/2018	Winter = 222 Spring = 243 Summer = 257 Fall = 212 Total = 934	0.98	2.42	No	0.93
Ontario Route 60	06-071-0027	3	Thermo BAM 5014i w/VSCC	08/01/2016	12/31/2018	Winter = 255 Spring = 244 Summer = 231 Fall = 231 Total = 961	0.99	2.56	No	0.92