APPENDIX D
Approved Waivers

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, available July 1, 2021. 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 site, for the time periods specified in Enclosure B to this letter: Central Los Angeles (Main St.) (AQS ID: 06-037-1103-9). Also, per 40 CFR part 58 Appendix D and §40 CFR 58.12(d)(1), we formally approve the sample frequency reduction waiver request for Big Bear Air Monitoring Station (AQS ID: 06-071-8001), for the time period specified in Enclosure C to this letter. Please include these waivers with next year’s network plan.

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. Enclosure A (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. Please note that we are not acting on the following system modification requests: Burbank (AQS ID: 06-037-1002), Hudson (AQS ID: 06-037-4006), North Long Beach (AQS ID: 06-037-4002), Ontario Fire Station (AQS ID: 06-071-0025), and Riverside Magnolia (AQS ID: 06-065-1003). We are also not acting on the following siting waiver request: Pasadena (AQS ID: 06-037-2005). More information about these system modification and siting waiver requests is included in Enclosure A. 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. 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

Gwen Yoshimura, Manager
Air Quality Analysis Office

Enclosures:
A. Annual Monitoring Network Plan Checklist
B. Approval of SCAQMD Request for PM$_{2.5}$ Waiver
C. Approval of Sample Frequency Reduction at Big Bear Air Monitoring Station

cc (via email): Jason Low, SCAQMD
    Rene Bermudez, SCAQMD
    Jin Xu, California Air Resources Board (CARB)
    Michael Miguel, CARB
    Manisha Singh, CARB
    Kathleen Gill, CARB
    Michael Werst, CARB
    Sylvia Vanderspek, CARB
    Ali Adams, CARB
    Ranjit Bhullar, CARB
B. Approval of the SCAQMD Request for PM$_{2.5}$ FEM Waiver

In the 2021 annual network plan for SCAQMD, your agency requested EPA’s approval to consider the 2018-2020 PM$_{2.5}$ data from your continuous federal equivalent method (FEM) monitor at the Los Angeles (Main St.) (AQS ID 06-037-1103-9) site as not eligible for comparison to the NAAQS. This enclosure is in response to your request and approves the monitor at the Los Angeles (Main St.) site for the specified dates as not eligible for comparison to the NAAQS (i.e., provides a waiver for NAAQS comparability).

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 2018-2020 data and have determined that the Los Angeles (Main St.) monitor does not meet the bias criteria in 40 CFR 53 and is approved as not eligible for comparison to the NAAQS for the noted time period:

<table>
<thead>
<tr>
<th>Site Name</th>
<th>AQS ID-Parameter Code-POC</th>
<th>Begin Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles (Main St.)</td>
<td>06-037-1103-9</td>
<td>01/01/2018</td>
<td>12/31/2020</td>
</tr>
</tbody>
</table>

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 monitor and dates in the table above to AQS under the parameter code 88502.

In providing the waiver for the data in the timeframe listed above, EPA expects that SCAQMD will continue to work to improve the comparability of the continuous PM$_{2.5}$ FEM monitor and filter-based monitor. If SCAQMD intends to submit data from this monitor under a parameter code other than 88101, an updated analysis of the bias for the 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 this monitor on a quarterly or more frequent basis, as well as the activities SCAQMD intends to take to address any continuing performance issues.

Your request also noted that the “PM$_{2.5}$ FEM datasets for Anaheim, Ontario Route 60 Near Road, Rubidoux and South Long Beach ... should be classified in AQS as 88101.” EPA agrees with these classifications for Anaheim (AQS ID: 06-059-0007-3), South Long Beach (AQS ID: 06-037-4004-3), Ontario Route 60 Near Road (AQS ID: 06-071-0027-3), and Rubidoux (AQS
ID: 06-065-8001-9) for the 2018-2020 data period and for the next 18 months (until December 31, 2021).

EPA also notes that the PM$_{2.5}$ FEM datasets for Mira Loma (AQS ID: 06-065-8005-3) and Long Beach Route 710 Near Road (AQS ID: 06-037-4008-3) were not included in your request for exclusion for comparison to the NAAQS, and as such, EPA is not approving a PM$_{2.5}$ FEM waiver for these monitors at this time. The PM$_{2.5}$ FEM datasets for these monitors need to be reclassified in AQS from 88502 to 88101 for the 2018-2020 data period and for the next 18 months (until December 31, 2021).

Please work to make the changes in AQS described in this approval in a timely manner. This will allow the AQS data record to accurately reflect monitors and design values relevant, and not relevant, for comparison to the NAAQS.
## EPA Evaluation of the Request for Exclusion of PM$_{2.5}$ Continuous FEM Data

### 2018-2020

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Site ID</th>
<th>Cont POC</th>
<th>Method Description</th>
<th>PM$_{2.5}$ Cont. Analysis Begin Date</th>
<th>PM$_{2.5}$ Cont Analysis End Date</th>
<th>Continuous/FRM Sampler pairs per season</th>
<th>Slope (m)</th>
<th>Intercept (r)</th>
<th>Meets bias requirement</th>
<th>Correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles (Main St.)</td>
<td>06-037-1103</td>
<td>9</td>
<td>Met-One BAM 1020 w/VSCC</td>
<td>01/01/2018</td>
<td>12/31/2020</td>
<td>Winter = 269; Spring = 269; Summer = 263; Fall = 263; Total = 1053</td>
<td>0.85</td>
<td>3.89</td>
<td>No</td>
<td>0.95</td>
</tr>
</tbody>
</table>
C. Approval of Sample Frequency Reduction at Big Bear Air Monitoring Station

This enclosure serves as an approval for the SCAQMD request for a PM$_{2.5}$ sampling frequency reduction waiver. This waiver approves a 1-in-6 day sampling frequency for the primary PM$_{2.5}$ sampler at the Big Bear State or Local Air Monitoring Station (SLAMS) site (AQS ID: 06-071-8001). Monitoring agencies must have PM$_{2.5}$ sampling frequency reductions approved by the U.S. Environmental Protection Agency (EPA), with such approval based on consideration of factors described in 40 CFR 58.12(d)(1) and the determination that the sampling frequency reduction will not compromise data needed for implementation of the applicable National Ambient Air Quality Standards (NAAQS).

Review of the record of data from SCAQMD’s Big Bear PM$_{2.5}$ sampler against the factors set forth in 40 CFR 58.12(d)(1) supports a determination that the sampling frequency reduction will not compromise data needed for implementation of the NAAQS. For design value years 2018, 2019, and 2020 (encompassing data from calendar years 2016-2020), Big Bear’s annual PM$_{2.5}$ design values were not within ±10 percent of the level of the 2012 annual PM$_{2.5}$ NAAQS. All three design values were below the 2012 annual PM$_{2.5}$ NAAQS. For design value years 2018, 2019, and 2020, Big Bear’s 24-hour PM$_{2.5}$ design values were not within ±5 percent of the level of the 2006 24-hour NAAQS. For data years 2018-2020, there were no exceedances of the 2006 24-hour PM$_{2.5}$ NAAQS. Big Bear’s PM$_{2.5}$ sampler does not determine the design value (2012 annual or 2006 24-hour PM$_{2.5}$ NAAQS) for the area. Big Bear does not have a National Core multipollutant monitoring station, required regional background or regional transport sites, nor a speciation sampler for a speciation trends network station.

Therefore, EPA approves the waiver request for 1-in-6 day PM$_{2.5}$ sampling frequency for the sampler at the Big Bear site. In next year’s annual network plan (ANP), please continue to provide the relevant design value information, mention this currently approved sampling frequency (or include this waiver approval in the ANP), and submit a new waiver request if continuation of the waiver is desired.
December 14, 2021

Rene Bermudez
Atmospheric Measurements Manager
Science and Technology Advancement
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Dear Manager Bermudez:

This letter provides the U.S. Environmental Protection Agency’s (EPA) review and approval for the South Coast Air Quality Management District’s (SCAQMD) discontinuation of the lead (Pb) State/Local Air Monitoring Station (SLAMS) monitor at the ATSF (Exide) site (Air Quality System (AQS) Site ID: 06-037-1406). A request for EPA approval of this network change was submitted to EPA on October 21, 2021. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the Pb SLAMS monitor at ATSF (Exide) was reviewed by EPA against criteria contained in 40 CFR 58.14(c), which states that requests for discontinuation “may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS [National Ambient Air Quality Standard] and if the requirements of appendix D to this part, if any, continue to be met.” The ATSF (Exide) monitor was originally sited to monitor Pb near the former Exide battery recycling facility in the 1990s. In 2007, a second Pb monitor, Rehrig (Exide), began operation and in 2015, Exide ceased operations following an order from the California Department of Toxic Substances Control (DTSC) for operations to cease and for the facility to be permanently closed. In 2020 as part of a U.S. federal court settlement resolving Exide’s bankruptcy filing, the Vernon Environmental Response Trust (VERT) was created to facilitate cleanup and continue air quality monitoring at the former Exide facility.

The Rehrig (Exide) monitor is located at the fenceline of the former facility, whereas the ATSF (Exide) monitor is located approximately 240 meters to the north-northeast from the fenceline of the former source. As described in SCAQMD’s letter requesting discontinuation approval, “the ATSF Pb monitor to be discontinued is not located to capture the maximum expected concentration… [and] [...]the Rehrig monitor is at the fenceline of the facility and is the maximum expected concentration location.” From 2010-2020, the maximum 3-month rolling average for the year measured at the Rehrig (Exide) monitor has been higher or the same as the 3-month
rolling average at the ATSF (Exide) monitor. In addition to the continued operation of regulatory monitoring at Rehrig (Exide), five daily VERT fenceline monitors will continue to operate. As described in the letter requesting discontinuation approval, SCAQMD commits to “resum[ing] monitoring at ATSF on a 1-in-3 schedule immediately upon notification of elevated VERT monitor concentrations until a South Coast AQMD compliance investigation is completed…. [and] South Coast AQMD will also schedule ATSF sample collection when deconstruction activities are scheduled to take place.”

The ATSF (Exide) Pb monitor was in attainment of the 2008 Pb NAAQS for the 2017-2020 design values; the 2016 design value was invalid due to incomplete data collected in 2014. Preliminary 2021 data are consistent with the historical trend and continue to show low concentrations. No Pb exceedances were recorded in the last five years at the ATSF (Exide) monitor, and the monitor is not the highest concentration Pb site in the Los Angeles County-South Coast Air Basin, CA Nonattainment Area. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the Pb NAAQS and will not prevent SCAQMD from meeting 40 CFR 58 Appendix D requirements.

Based on these analyses, EPA approves SCAQMD’s discontinuation of the ATSF (Exide) Pb SLAMS monitor. Please include this letter and the relevant monitor and site information in the next SCAQMD annual monitoring network plan.

EPA further notes that, as stated in the letter, SCAQMD intends to reduce the sampling frequency of the Rehrig (Exide) Pb SLAMS monitor from every day sampling to 1-in-6 day sampling. Since the minimum required sampling frequency for SLAMS Pb monitors is 1-in-6 day sampling. EPA approval is not required, but this information should be reflected in the next SCAQMD annual monitoring network plan. SCAQMD’s letter requesting discontinuation approval notes that this change, as well as the closure of the ATSF (Exide) monitor, was discussed at the DTSC Exide community briefings on May 13 and July 29, 2021. Both changes were also discussed in SCAQMD’s 2021 Annual Network Plan which was made available for public review; no comments were received.

If you have any questions, please feel free to contact me at (415) 947-4134 or Jennifer Williams of my staff at (213) 244-1824.

Sincerely,

GWEN YOSHIMURA  
Digitally signed by GWEN YOSHIMURA  
Date: 2021.12.14 15:35:27 -08'00'

Gwen Yoshimura, Manager  
Air Quality Analysis Office  
Air and Radiation Division

cc (via email): Kevin Durkee, SCAQMD
April 15, 2022

Rene Bermudez
Atmospheric Measurements Manager
Science and Technology Advancement
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Dear Manager Bermudez:

This letter provides the U.S. Environmental Protection Agency’s (EPA) review and approval for the South Coast Air Quality Management District’s (SCAQMD) discontinuation of the PM$_{2.5}$, PM$_{10}$, and Pb State/Local Air Monitoring Station (SLAMS) monitors at the Long Beach (South) site (Air Quality System (AQS) Site ID: 06-037-4004). A request for EPA approval of this network change was submitted to EPA on February 18, 2022. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. Discontinuation of these PM$_{2.5}$, PM$_{10}$, and Pb SLAMS monitors was reviewed by EPA against criteria contained in 40 CFR 58.14(c), which states that requests for discontinuation “may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS [National Ambient Air Quality Standard] and if the requirements of appendix D to this part, if any, continue to be met.” EPA has reviewed SCAQMD’s request and data associated with these monitors and concludes that the criteria contained in 40 CFR 58.14(c) are met as described below; EPA therefore approves discontinuation of the PM$_{2.5}$, PM$_{10}$, and Pb SLAMS monitors at the Long Beach (South) site.

PM$_{2.5}$
The Long Beach (South) site is within a PM$_{2.5}$ nonattainment area for three PM$_{2.5}$ standards: the 1997 annual, the 2012 annual, and the 2006 24-hour NAAQS. This site was in attainment of the 1997 annual, 2012 annual and 2006 24-hour PM$_{2.5}$ NAAQS based on the four most recent design values (design values 2017-2020 encompassing data years 2015-2020); the 2016 design values for the 1997 annual, 2012 annual and 2006 24-hour PM$_{2.5}$ NAAQS were invalid due to incomplete data in 2014. ¹ While the period of incomplete 2014 data occurred in seasons of historically elevated PM$_{2.5}$ concentrations, the most recent four design values attain the 1997 annual, 2012 annual and 2006 24-hour NAAQS. In addition, preliminary 2021 data are consistent with the historical trend and continue to show design value concentrations below the levels of the 1997 annual, 2012 annual and 2006 24-hour PM$_{2.5}$ NAAQS. The site is not the design value site for the 1997 annual PM$_{2.5}$, 2012 annual PM$_{2.5}$, or the 2006 24-hour PM$_{2.5}$ NAAQS.

¹ This site had three incomplete quarters in 2014 that resulted in invalid 2016 design values for the 1997 annual, 2012 annual and 2006 24-hour PM$_{2.5}$ NAAQS.
PM10 Los Angeles-South Coast Air Basin, CA nonattainment area, and has consistently measured lower concentrations of PM10 than other monitors in the Los Angeles-South Coast Air Basin, CA nonattainment area. Therefore, the closure of this monitoring site does not compromise data collection needed for implementation of the PM2.5 NAAQS.

SCAQMD currently operates nine other PM2.5 SLAMS monitoring sites in the Los Angeles-Long Beach-Anaheim, CA Metropolitan Statistical Area (MSA), exceeding 40 CFR 58 Appendix D minimum monitoring requirements for the area. This site is not needed to fulfill 40 CFR 58 Appendix D MSA requirements for the maximum PM2.5 concentration site, near-road site, additional monitoring site in an area of poor air quality, or for minimum number of continuous PM2.5 monitors. Also, this site is not needed to fulfill 40 CFR 58 Appendix D requirements for PM2.5 background or transport sites, or PM2.5 chemical speciation sites within the State. Therefore, the closure of this monitoring site will not prevent SCAQMD from meeting 40 CFR 58 Appendix D requirements.

PM10
The Long Beach (South) PM10 monitor is within a PM10 maintenance area for the 1987 24-hour PM10 NAAQS. This monitor was in attainment of the 1987 24-hour PM10 NAAQS based on the 2016 design value; the 2017-2020 design values were invalid due to incomplete data in 2017 and 2020. However, no 24-hr PM10 exceedances were recorded at the monitor in the last five design value periods (design values 2016-2020, which include five calendar years that meet data completeness requirements); based on the historical data record, we would not expect exceedances to have occurred during the periods of missing data. Preliminary 2021 data are consistent with the historical trend and continue to show concentrations below the levels of the 1987 24-hour PM10 NAAQS. This monitor is not the design value monitor for the 1987 24-hour PM10 Los Angeles-South Coast Air Basin, CA maintenance area and has consistently measured lower concentrations of PM10 than other monitors in the Los Angeles-South Coast Air Basin, CA maintenance area. Therefore, the closure of this monitoring site does not compromise data collection needed for implementation of the PM10 NAAQS.

SCAQMD currently operates eight other PM10 SLAMS sites in the Los Angeles-Long Beach-Anaheim, CA MSA, exceeding 40 CFR 58 Appendix D minimum monitoring requirements for the area. Therefore, the closure of this monitoring site will not prevent SCAQMD from meeting 40 CFR 58 Appendix D requirements.

Pb
The Long Beach (South) site is within a Pb nonattainment area for the 2008 Pb NAAQS. This site was invalid for the 2008 Pb NAAQS for the 2016-2020 design values due to incomplete data collected in 2016, 2018, and 2020. However, no 2008 Pb NAAQS exceedances were recorded at the monitoring site in the last five design value periods (design values 2016-2020, which include four calendar years that meet data completeness requirements); based on the historical data record, we would not expect exceedances to have occurred during the periods of missing data. Preliminary 2021 data are consistent with the historical trend and continue to show concentrations below the levels of the 2008 Pb NAAQS. The site is not the design value site for the 2008 Pb Los Angeles-South Coast Air Basin, CA nonattainment area and has consistently measured lower concentrations of Pb than other monitors in the Los Angeles-South Coast Air Basin, CA nonattainment area. Therefore, the closure of this site does not

---

3 This monitor had three incomplete quarters in 2017 and one incomplete quarter in 2020 that resulted in invalid 2017-2020 design values.

3 This site had one incomplete 3-month rolling average in 2016, two incomplete 3-month rolling averages in 2018, and five incomplete 3-month rolling averages in 2020 that resulted in invalid 2016-2020 design values.
compromise data collection needed for implementation of the Pb NAAQS.

This site is not needed to fulfill 40 CFR 58 Appendix D requirements for source-oriented monitoring at airports that emit 1.0 or more tons of Pb per year, non-airport sources that emit 0.5 tons or more of Pb per year, and it is not required by the EPA Regional Administrator. Therefore, the closure of this monitoring site will not prevent SCAQMD from meeting 40 CFR 58 Appendix D requirements.

In addition, EPA stated in its 2020 Technical Systems Audit (TSA) and its response letter to SCAQMD’s 2021 annual monitoring network plan that the Long Beach (South) site has not been meeting siting requirements. EPA’s 2020 TSA also included a finding that SCAQMD’s PM\textsubscript{10} and Pb networks experienced significant data loss and suggested a course of action that included reviewing sites for potential closure. The closure of the Long Beach (South) site resolves the siting requirements finding and partially addresses the data loss finding.

Based on these analyses, EPA approves SCAQMD’s discontinuation of the Long Beach (South) PM\textsubscript{2.5}, PM\textsubscript{10}, and Pb SLAMS monitors. Please include this letter and the relevant monitor and site information in the next SCAQMD annual monitoring network plan.

If you have any questions, please feel free to contact me at (415) 947-4134 or Jennifer Williams of my staff at (213) 244-1824.

Sincerely,

GWEN YOSHIMURA
Gwen Yoshimura
Manager, Air Quality Analysis Office

cc (via email): Kevin Durkee, SCAQMD