## <u>Certification that the Bay Area Air Quality Management District's Existing NNSR</u> <u>Program Addresses the 2015 Ozone NAAQS SIP Requirements Rule</u>

The Bay Area Air Quality Management District (BAAQMD) is certifying that our existing NNSR program, covering the San Francisco Bay Area nonattainment area for the 2015 ozone NAAQS, is at least as stringent as the requirements at 40 CFR 51.165 for ozone and its precursors, as amended by the final rule titled *Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements* (83 FR 62998, December 6, 2018).

The requirements necessary to appropriately implement the BAAQMD's NNSR program include, but are not limited to, those set forth in the following table:

2015 Ozone NAAQS NNSR SIP Requirements		
	NNSR Requirements of 40 CFR 51.165	Corresponding NNSR Requirements in BAAQMD Regulation 2
1.	(a)(1)(iv)(A)( $I$ )(i)-(iv) and (2): Major source thresholds for ozone – VOC and NOx	Regulation 2-2-217
2.	(a)(1)(iv)(A)(3): Change constitutes a major source by itself	Regulation 2-2-217
3.	(a)(1)(v)(E): Significant net emissions increase of NOx is significant for ozone	Regulation 2-2-218
4.	(a)(1)(v)(F): Any emissions change of VOC in Extreme area triggers NNSR	Not Applicable
5.	(a)(1)(x)(A)-(C) and (E): Significant emissions rates for VOC and NOx as ozone precursors	Regulation 2-2-218 and 2-2-227.2
6.	(a)(3)(ii)(C)( $I$ )-(2): Provisions for emissions reduction credits	Regulation 2-2-211 and 2-2-605.1
7.	(a)(8): Requirements for VOC apply to NOx as ozone precursors	Regulation 2-1, Regulation 2-2 and Regulation 2-4
8.	(a)(9)(i)-(iv): Offset ratios for VOC and NOx for ozone nonattainment areas	Regulation 2-2-302.2.2
9.	(a)(12): Anti-backsliding provisions	Regulation 2-2-217 and Regulation 2-2-302.2.2
10.	(i) Public participation requirements	Regulation 2-2-404

These requirements are explained more fully in the following discussion. They are also discussed in further detail in EPA's documents approving the BAAQMD's current NNSR program. These documents include the Federal Register notices for EPA's limited approval and limited disapproval of the BAAQMD's NNSR program in 2016 (80 FR 52236, Aug. 28, 2015, and 81 FR 50339, Aug. 1, 2016), and for EPA's subsequent full approval of the program in 2018 (83 FR 8822, March 1, 2018, and 83 FR 23372, May 21, 2018); as well as EPA's August 19, 2015, Technical Support Document (TSD).

- 1. 40 CFR sections 51.165(a)(1)(iv)(A)(*I*)(i)-(iv) and (2) establish the threshold for when a facility must be treated as a "major stationary source" for ozone for purposes of NNSR. The major source threshold for a marginal nonattainment area like the Bay Area is a potential to emit 100 tons per year (tpy) or more of NOx and/or VOC. (Lower thresholds apply in areas classified as serious, severe, or extreme nonattainment and in ozone transport regions, but the Bay Area is classified as marginal and is not an ozone transport region, so the 100 tpy threshold applies.) BAAQMD Regulation 2-2-217 defines "major facility" the BAAQMD's equivalent of "major stationary source" as a facility that has the potential to emit 100 tpy more of POC<sup>2</sup> or NOx (as well as SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and/or CO). The BAAQMD major facility/major stationary source threshold is therefore consistent with the requirements of 40 CFR 51.165. EPA has confirmed that this "major facility" definition in Regulation 2-2-217 is consistent with EPA's "major stationary source" requirements. *See* TSD p. 105-106 (approving the "major facility" definition in all respects except fugitive emissions); and 83 FR 8822, 8824 & 83 FR 23372 (approving revised rules with change to address deficiency related to fugitive emissions).
- 2. 40 CFR section 51.165(a)(1)(iv)(A)(3) provides that the definition of "major stationary source" (or "major facility" under the BAAQMD's nomenclature) must include situations where a physical change is implemented at a facility that is not otherwise over the "major" facility thresholds, but the change is of sufficient magnitude that it would constitute a "major facility" all by itself. BAAQMD Regulation 2-2-217 satisfies this requirement by providing that "A physical change at a facility that does not otherwise qualify as a major facility is a new major facility if the change would constitute a major facility by itself." EPA's approval of the BAAQMD's "major facility" definition in Regulation 2-2-217 referenced in the previous paragraph specifically addressed this aspect of 40 CFR section 51.165(a)(1)(iv).
- 3. 40 CFR section 51.165(a)(1)(v)(E) requires that any significant net emissions increase of NOx must be considered significant for ozone. BAAQMD Regulation 2-2-218 defines "major modification" as a new or modified source at a major facility (or combination of such

<sup>&</sup>lt;sup>1</sup> EPA's definition of a "stationary source" is equivalent to the BAAQMD's definition of a "facility." EPA's definition of "stationary source" in 40 CFR 51.165(a)(1)(i) is "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." The BAAQMD's definition of "facility" in Regulation 2-1-213 is "any source, building, structure or installation that emits or may emit any air pollutant," and its definition of "source" in Regulation 2-1-221 is "any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants." The BAAQMD's definitions therefore refer to a major "facility" in the same way that EPA's definitions refer to a major "stationary source." EPA has confirmed that the BAAQMD's definition of "facility" is consistent with the federal definition of "stationary source." *See* TSD pp. 29 & 105.

<sup>&</sup>lt;sup>2</sup> The BAAQMD's NNSR Program uses the term "precursor organic compound" (POC), which is defined under BAAQMD Regulations 2-1-208, 1-233, 1-234, and 1-235 to include the same reactive organic carbon compounds as are included in EPA's definition of "volatile organic compound" (VOC) used in 40 CFR section 51.165, as defined under 40 CFR section 51.165(a)(1)(xix) and 40 CFR section 51.100(s). EPA has determined that the BAAQMD's term POC is substantially equivalent to the federal term VOC for purposes of the BAAQMD's NNSR program. *See* TSD p. 109.

new and modified sources at a major facility that are part of a single common project) that will cause an increase in emissions over the 40 tpy federal "Significant Emission Rate" in 40 CFR section 51.165(a)(1)(x)(A). A significant net increase in NOx over this threshold is a "major modification" for purposes of the BAAQMD's NNSR program and is considered significant for ozone. EPA has confirmed that the BAAQMD's NNSR regulations incorporate the appropriate significance thresholds for each pollutant based on the Bay Area's nonattainment status for each pollutant, which includes ozone. *See* TSD p. 111.

- 4. 40 CFR section 51.165(a)(1)(v)(F) applies only in extreme ozone nonattainment areas. The Bay Area is classified as 'marginal' nonattainment of the 2015 ozone standard, so this requirement is not applicable.
- 5. 40 CFR sections 51.165(a)(1)(x)(A)-(C) and (E) require the BAAQMD's NNSR program to establish the thresholds for a "significant" emissions increase and net emissions increase at 40 tpy for VOC and NOx. BAAQMD Regulation 2-2-227.2 establishes the "significant" increase threshold at 40 tpy for both NOx and VOC. EPA has determined that the BAAQMD's definition of "significant," as incorporated into the definition of "major modification" in Regulation 2-2-218, is consistent with the definition found in 40 CFR 51.165(a)(1)(x). See TSD p. 111.
- 6. 40 CFR sections 51.165(a)(3)(ii)(C)(1)-(2) set forth requirements for the BAAQMD's offsets provisions.

Section 51.165(a)(3)(ii)(C)(I)(i) requires that any emission reductions used as offsets must be surplus, permanent, quantifiable, and federally enforceable. BAAQMD Regulations 2-2-211 and 2-2-605.1 provide that an emission reduction can qualify as an "emission reduction credit" eligible to be used for offsets purposes only if it is "in excess of the reductions required by applicable regulatory requirements" (i.e., surplus), and only if it is real, permanent, quantifiable, and enforceable. EPA has determined that these provisions satisfy the requirements specified in 40 CFR 51.165(a)(3)(ii)(C)(I)(i). See TSD p. 115, section 7.3.16.3

Sections 51.165(a)(3)(ii)(C)(I)(ii) and (a)(3)(ii)(C)(2) provide that emission reductions can be used as offsets only if they occurred after the last day of the base year used for the SIP planning process, with two exceptions. First, section 51.165(a)(3)(ii)(C)(I)(ii) allows reductions from before the last day of the base year to be used if they are explicitly included

offsets as would be required under the federal program. These provisions further ensure that the BAAQMD's NNSR offsets provisions are at least as stringent as the requirements in 40 CFR section 51.165 for ozone and its precursors.

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<sup>&</sup>lt;sup>3</sup> In addition, to the extent that there may be any discrepancy between the way the BAAQMD's NNSR program determines how emission reductions are in excess of applicable regulatory requirements and how EPA's federal requirements determine how emission reductions are in excess of applicable regulatory requirements, Regulation 2-2-412 requires the BAAQMD to conduct an analysis of any discrepancies each year and to provide additional reductions (offsets) as necessary to ensure that the BAAQMD's program is obtaining at least as many NOx and POC

in the planning inventory used to develop the attainment demonstration (as long as they are not from before August 7, 1977). Second, section 51.165(a)(3)(ii)(C)(2) allows such reductions to be used to offset emissions from a new source if the new source is a replacement of the source that was shut down or curtailed to generate the reductions, and that shutdown or curtailment occurs after the permit application for the new source is filed.

The Bay Area is classified as a "marginal" nonattainment area for the 2015 ozone NAAQS, so the BAAQMD is not required to submit an attainment demonstration for the that NAAQS. Because the BAAQMD is not required to submit an attainment demonstration, there is no "projected emission inventory" in which to explicitly include the emissions from previously shutdown or curtailed emission units. The BAAQMD does submit emission inventories, however, and those inventories include all of the banked emission reduction credits from previously shutdown or curtailed emission units that are eligible to be used as offsets. EPA has previously confirmed that this practice complied with 51.165(a)(3)(ii)(C)(1)(ii) for the 2008 8-hour ozone NAAQS, for which the Bay Area was also a marginal nonattainment area. *See* TSD p. 115-116, section 7.3.16. For the same reasons, this practice also complies with 51.165(a)(3)(ii)(C)(1)(ii) for the 2015 ozone NAAQS.

- 7. 40 CFR section 51.165(a)(8) states that NNSR requirements applicable to major sources and major modifications for VOC must be equally applicable to major sources and major modifications for NOx. All of the NNSR requirements in BAAQMD Regulation 2 including requirements for major sources, major modifications, significant emission rates, emission reduction credits, offsets, and Best Available Control Technology (the equivalent of Lowest Achievable Emissions Rate in EPA's NNSR regulations) apply equally to NOx as they do to POC. EPA has confirmed that these provisions satisfy 40 CFR section 51.165(a)(8). See TSD p. 121, section 7.3.25.
- 8. 40 CFR sections 51.165(a)(9)(i)-(iv) establish the minimum required emission offset ratios for VOCs and NOx for ozone nonattainment areas. The Bay Area is classified as a "marginal" nonattainment area for the 2015 Ozone NAAQS, and it is not an ozone transport region. This nonattainment status corresponds to a minimum offset ratio of 1.1:1 under 40 CFR section 51.165(a)(9)(ii)(A). However, the Bay Area was previously designated as "moderate" nonattainment for the 1979 1-hour ozone NAAQS, and EPA's anti-backsliding requirements therefore require the BAAQMD's NNSR program to meet the minimum offset ratio for moderate nonattainment, which is 1.15:1. The BAAQMD satisfies this requirement through Regulation 2-2-302.2.2, which requires federally-enforceable offsets at a 1.15:1 ratio for all emissions increases at any facility with a potential to emit 35 tpy or more of NOx or POC. EPA has previously confirmed that this offset ratio complied with section 51.165(a)(9) for the 2008 8-hour ozone NAAQS, for which the Bay Area was also a marginal

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<sup>&</sup>lt;sup>4</sup> Since previous emission reductions are authorized to be used as offsets under 51.165(a)(3)(ii)(C)(I)(ii), there is no need to address 51.165(a)(3)(ii)(C)(2). See TSD p. 116, Section 7.3.17.

- nonattainment area. *See* TSD p. 121-122, section 7.3.26. For the same reasons, this ratio also complies with 51.165(a)(9) for the 2015 ozone NAAQS.
- 9. 40 CFR section 51.165(a)(12) incorporates the "anti-backsliding" provisions of 40 CFR section 51.1105. These provisions require the BAAQMD to implement the NNSR major source thresholds and offset requirements based on its previous "moderate" non-attainment status for older ozone NAAQS that predate the 2015 NAAQS. For the major source thresholds, the moderate threshold is the same as the marginal threshold. It is 100 tpy, which the BAAQMD NNSR program complies with as discussed in Paragraph 1 above. For the offsets requirements, the offset ratio required for moderate nonattainment areas is 1.15:1, which the BAAQMD NNSR program complies with as discussed in Paragraph 8 above.
- 10. 40 CFR section 51.165(i) requires the BAAQMD to use a "consistent noticing method" to provide notice of draft permits for public comment, which can either be through posting on the agency's website or through publication in a newspaper of general circulation in the area where the source is located. The BAAQMD's NNSR program uses the second option. BAAQMD Regulation 2-2-404 requires that for major facilities and major modifications, the agency must publish notice prominently in at least one newspaper of general circulation within the District. This is a "consistent noticing method" that satisfies 40 CFR section 51.165(i).