

### History of Updates to AQIA Modeling Guidelines:

1. The original AQIA guidance document, titled *Modeling Guidelines for Air Quality Impact Analysis*, was posted in February 1991 and updated in June 1996.
2. Because this original document had become obsolete, the District created a completely new document, titled *Modeling Guidelines for Air Quality Impact Assessments* (AQIA Modeling Guidelines), which was posted in January 2018.
3. Updates to AQIA Modeling Guidelines in March 2018:
  - a. Section 3.8: A link to the Paradise Road meteorological data was added to Table 3.8-1.
  - b. Section 3.8: The latitude of the Santa Maria Airport site was corrected from 35.899 to 34.899 in Table 3.8-1.
  - c. Appendix A, Section A.2: The reference to Table A.2-1 in the last paragraph of this section was corrected (it previously read Table A-1).
  - d. Appendix B, Section B.1.1: The reference to Table B.1.1-1 in the first paragraph in this section was corrected (it previously read Table B.2.1-1).
4. Updates to AQIA Modeling Guidelines in April 2019:
  - a. Section 2.1.1: Table 2.1.1-1 was edited to include all national and state ambient air quality standards, and language was updated accordingly.
  - b. Section 2.1.2: The name of Table 2.1.2-1 was changed from “Air Quality Standards and Increments for Other Pollutants” to “Air Quality Standards for Other Pollutants” because there are no increment standards for these pollutants.
  - c. Section 3: The current version of AERMOD was updated.
  - d. Sections 3.2.1 and 3.2.1.2: The language in these sections was updated to reflect the current EPA guidance that ARM2, not ARM, be used to estimate NO<sub>2</sub> concentrations. The default minimum NO<sub>2</sub>/NO<sub>x</sub> ratio was updated to 0.50.
  - e. Sections 3.2.2 through 3.2.4: The language in these sections was updated to reflect the correct way to model 1-hour NO<sub>2</sub>, 1-hour SO<sub>2</sub> and 24-hour PM<sub>2.5</sub> for the NAAQS.
  - f. Section 3.2.5: The language at the end of this section for reporting the results was removed.
  - g. Section 3.6: Equation 3.6-1 was corrected.
  - h. Section 3.8: Table 3.8-1 was updated to reflect the District’s approved meteorological data for use in AERMOD.
  - i. Section 4: Information about the AAQS and increment analyses was split into two newly created sections 4.1 and 4.2.
  - j. Section 4.1: Text was rearranged, and language was added to explain why 1-hour NO<sub>2</sub> and 1-hour SO<sub>2</sub> must be modeled for comparison to both the NAAQS and CAAQS. Table 4.1-1 was updated. Table 4.1-2 was added to show the appropriate methodology to determine the background concentration for each AAQS. Language was added explaining a situation where the modeler may report only the most conservative result to avoid the requirement of multiple runs for the same pollutant and averaging period.

- k. Section 5.5.1: Table 5.5.1-1 was edited to show example results for 1-hour SO<sub>2</sub> and 1-hour NO<sub>2</sub> for both the CAAQS and NAAQS.
- l. Section 6: The references were updated.
- m. Appendix A: Language was edited to match Form -15i. Table A.2-1 was edited to show the correct emissions rate adjustment factors.