

**RULE 805. AIR QUALITY IMPACT ANALYSIS, MODELING, MONITORING, AND AIR QUALITY INCREMENT CONSUMPTION**  
(Adopted 4/17/1997, revised 8/25/2016)

**A. Applicability**

This rule shall apply to any new or modified stationary source that requires an air quality impact analysis, modeling, monitoring, or air quality increment analysis. Projects subject to Federal Prevention of Significant Deterioration shall also comply with the requirements of Rule 810, Federal Prevention of Significant Deterioration.

**B. Exemptions**

None.

**C. Definitions**

See Rule 102, Definitions, and Rule 801, New Source Review – Definitions and General Requirements, for definitions.

**D. Requirements – General**

1. Air Quality Models

All air quality models shall be consistent with the requirements provided in the most recent "Guideline on Air Quality Models" prepared by the Environmental Protection Agency (Appendix W to 40 CFR Part 51) unless the Control Officer finds that such a model is inappropriate for use. After making such finding, the Control Officer may designate an alternate model only after allowing for public comment and only with concurrence of the California Air Resources Board and the Environmental Protection Agency.

2. Effective Stack Height

For the purposes of determining effective stack height, the influence of a nearby structure is limited to five times its height or width, whichever is less, downwind. In meeting the requirements of this rule pertaining to compliance with applicable ambient air quality standards or increments, the degree of emission limitation required shall not be affected by:

- a. so much of the stack height of any source as exceeds good engineering practice, or
- b. any other dispersion technique.

**E. Requirements – Air Quality Impact Analysis: Class I Area**

If a new or modified source will impact a Class I Area, the applicant shall analyze the stationary source's impact on air quality related values for those values which the Federal Land Manager has identified.

**F. Requirements – Ambient Air Quality Standards and Air Quality Increments**

1. In no case shall the emissions from the new or modified stationary source cause the violation of an ambient air quality standard or lead to the violation of any air quality increment.
2. Baseline air quality shall be the ambient concentration level reflecting actual air quality as monitored by District monitoring equipment or by applicant pre-construction monitors installed

pursuant to Rule 802.G, Requirements – Air Quality Impact Analysis: Pre and Post-Construction Monitoring.

3. The applicant may consume the full increment range, where provided in Table 1, if the applicant provides alternative mitigation as required herein. The cost of such mitigation shall not exceed \$333 per year per microgram/m<sup>3</sup> over the lower level of the increment range for the pollutant. The maximum cost of mitigation for the first year shall be based on the maximum modeled concentration of the projected peak emissions year, thereafter depreciating this amount by 10 percent per year over 10 years or the life of the project, whichever is less. Cost of mitigation during the final year of the project shall be prorated to reflect the portion of the year during which the facility is in operation.

**Table 1: Air Quality Standards and Increments <sup>1</sup>**

<i><b>Pollutant:</b></i> Averaging Period	<b>Maximum Allowable Increase – Increments</b> (ug/m <sup>3</sup> )		<b>Air Quality Standard <sup>2</sup></b> (ug/m <sup>3</sup> )
	<b>Class I</b>	<b>Class II</b>	
<i><b>Total Suspended Particulates:</b></i>			
Annual Geometric Mean	5	19	--
24-Hour Maximum	10	37	--
<i><b>Sulfur Dioxide:</b></i>			
Annual Arithmetic Mean	2	20	80
24-Hour Maximum	5	91	105
3-Hour Maximum	25	512	1,300
1-Hour Maximum	--	--	196
<i><b>Nitrogen Dioxide:</b></i>			
Annual Arithmetic Mean	2.5	25	57
1-Hour Maximum <sup>3</sup>	10	100-188	188
<i><b>Carbon Monoxide:</b></i>			
8-Hour Maximum	200	2,500	10,000
1-Hour Maximum	800	10,000	23,000
<i><b>Reactive Organic Compounds:</b></i>			
3-Hour Maximum <sup>3</sup>	3	40-160	--
<i><b>Particulate Matter (&lt;10 μm):</b></i>			
Annual Arithmetic Mean	4	17	20
24-Hour Maximum <sup>3</sup>	8	12-30	50
<i><b>Particulate Matter (&lt;2.5 μm):</b></i>			
Annual Arithmetic Mean	1	4	12
24-Hour Maximum	2	9	35

<sup>1</sup> Also see Rule 809 and Rule 810 for projects subject to Federal review.

<sup>2</sup> Air Quality Standards represent the most stringent of State and Federal standards.

<sup>3</sup> The applicant may consume the full increment range pursuant to the requirements of Section F.3.

**G. Requirements – Calculations for an Air Quality Impact Analysis and/or Modeling**

1. The maximum design capacity (potential to emit) of a new stationary source or modification shall be used to determine the emissions from the new source or modification. However, the applicant may agree to enforceable limitations on the operation of the new source or modification. If those limitations are included in both Authorities to Construct and Permits to Operate issued according to the rule, then those limitations shall be used to establish the emissions from the new source or modifications.
2. The emissions from an existing source shall be based on the actual operating conditions of the existing source averaged over the three consecutive years immediately preceding the date of application, or such shorter period as may be applicable in cases where the existing source has not been in operation for three consecutive years. The Control Officer may approve any other time period of at least three years within five years prior to the date of application that is more representative of normal source operation. If violation of laws, rules, regulations, permit conditions, or orders of the District, the Air Resources Board, or the Environmental Protection Agency occurred during the period used to determine the operating conditions, then an adjustment shall be made to determine the emissions the existing source would have caused without such violations.

**H. Requirements – Air Quality Increment Analysis**

The Control Officer shall evaluate the impact on the air quality increment of the emissions from the proposed source. Any emissions from secondary emissions associated with the source shall be included in the determination of increment consumption.