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

[Many of these new provisions are being relocated from Rule 803.]

### A. Applicability

This rule shall apply to any new or modified stationary source where that requires an air quality impact analysis, or modeling, monitoring, or air quality increment analysis is required. -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 Rules 102 and 801 for definitions. See Rule 102, Definitions, and Rule 801, New Source Review - Definitions and General Requirements, for definitions.

[Deleted since the term is not necessary.]

"Excessive pollutant concentrations" means that concentration in excess of any applicable ambient air quality standard or increment.

[Relocated to Rule 102.]

"Effective Stack Height" means the height equal to the lesser of 1) 30 meters, or 2) H + 1.5 L, where H is the height of, and L is the lesser dimension (height or width) of, the source, or nearby structure, or, 3) such other height as is demonstrated to ensure that emissions do not result in excessive pollutant concentrations in the immediate vicinity of the source as a result of atmospheric downwash, eddies, or wakes which may be created by the source, nearby structures or terrain.

## D. Requirements - General

[The following updates reflect actual District practice. EPA modeling guidance is found in Appendix W to Part 51 of the Code of Federal Regulations. Fee provision is already covered by Rule 210]

# 1. Air Quality Models:

All air quality models shall be consistent with the requirements provided in the most recent "Guidelines 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. As of the adoption date of this rule, "Guideline on Air Quality Models," is 450/2 78 027R, July 1986. -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. District costs relating to modeling shall be reimbursed by the applicant pursuant to District cost reimbursement provisions.

## 2. Requirement—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 Rrule 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

[*The following is transferred from Rule 803.F.3.*]

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.

[The following is transferred from Rule 803.I with text modifications to simplify the process. Since federal PSD projects are also subject to Rule 810, we are able to simplify the process under this rule by eliminating the complex procedures regarding baselines and have simplified the increment consumption options. These changes reflect our actual practice over the years for non-federal PSD projects. These more complex procedures remain under Rule 810 for projects subject to federal PSD requirements.]

## 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. The provisions contained in Rule 805, shall be used to estimate the effects of a new or modified source. In making this determination the Control Officer shall take into account the mitigation of emissions through offsets obtained pursuant to this Rule.

## [Moved from below to enhance clarity]

- 2. <u>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.</u>
- The applicant may consume the full increment range, where noted provided in Table 31, if the applicant enters into a Memorandum of Agreement with the District providesing for alternative mitigation as required herein. The cost of such mitigation shall not exceed \$333 per year per microgram/m³ over the lower level of the increment range for the stationary source, and thereafter based on the single actual worst case contribution by the stationary source to monitored concentrations during the previous year. If post construction monitoring shows no consumption beyond the lower level of the increment range for any period of three consecutive years after the year of peak projected emissions, then no further monitoring or mitigation shall be required for the purposes of this sub-section. If, subsequent to the termination of monitoring or mitigation, the APCD determines that consumption has increased beyond the lower level of the increment range, District may require reinstatement of post construction monitoring or mitigation. As an alternative to monitoring based mitigation costs, the applicant may choose, with consent of the District, to base tThe 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. The District's consent shall not be unreasonably withheld provided that the 10 year depreciation schedule results in an equitable, realistic approximation of the applicant's projected annual emission rate. 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.

This increment and mitigation requirement shall be reviewed if the Air Resources Board or Environmental Protection Agency develop an increment or other alternative with supporting technical rationale

Baseline air quality shall be the ambient concentration level reflecting actual air quality as monitored or modeled as of the existing baseline date shown in the air quality increments table, minus any contribution attributable to emissions from major stationary sources and modifications (as defined in 40 CFR 52.21(b) as it existed on 8-7-80) constructed since January 6, 1975.

[Note: The Rule 803 Table 3 is being transferred here with amendments. The baseline date column was deleted, but does not show as such due to MS Word limitations.]

Table 31: -AirIR Quality UALITY Standards and INCREMENTS ncrements 1

Maximum Allowable Increase
(in micrograms/cubic meter)

<del>(in micrograms/cubic meter)</del>				
	Maximum Allowable Increase – Increments (ug/m^3)		Air Quality	
			Standard <sup>2</sup>	
Pollutant:			$(ug/m^3)$	
Monitoring Level Averaging	Class I	Class II		
<u>Period</u>				
Total Suspended Particulates:				
Annual Geometric Mean	5	19	<u>=</u>	
24-Hour Maximum	10	37		
Sulfur Dioxide:				
Annual Arithmetic Mean	2	20	80	
24-Hour Maximum	5	91	<del>365</del> 105	
3-Hour Maximum	25	512	1,300	
1-Hour Maximum	<u>==</u>	<u>=</u>	<u>196</u>	
Nitrogen Oxides Dioxide:				
Annual Arithmetic Mean	2.5	25	<del>100</del> 57	
1-Hour Maximum <sup>1-3</sup>	10	100_	470188	
1 Hour Maximum		to 470 188		
Carbon Monoxide:				
8-Hour Maximum	200	2,500	10,000	
1-Hour Maximum <sup>‡</sup>	800	10,000	40,00023,000	
Reactive Organic Compounds <sup>1</sup> :				
3-Hour Maximum <sup>3</sup>	3	40-160	<u></u>	
Particulate Matter (<10 µm):				
Annual Arithmetic Mean	4	17	<del>50</del> 20	
-24 Hour Maximum	8	<del>30</del>	<del>150</del>	

24-Hour Maximum <sup>1,3</sup>	<u>8</u>	12-30	50
Particulate Matter (<2.5 µm):			
Annual Arithmetic Mean	<u>1</u>	<u>4</u>	<u>12</u>
24-Hour Maximum	<u>2</u>	<u>9</u>	<u>35</u>

Also see Rule 809 and Rule 810 for projects subject to Federal review. Not a federal increment.
 Air Quality Standards represent the most stringent of State and Federal standards.

[The following is transferred from Rule 803.J with slight text modifications.]

## 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 federally 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 relations, 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 adjustments to the operating conditions shall be made to determine the emissions the existing source would have caused without such violations.

[The following is transferred from Rule 803.K.1. Except for the Air Quality Increment Analysis section, the remaining provisions of Rule 803.K are not being transferred as they are redundant to Rules 802 and 810]

# H. Requirements - Air Quality Increment Analysis Administration

#### 1. Air Quality Increment Analysis

The Control Officer shall evaluate the impact on the air quality increment of the emissions from the proposed source<del>and any offsets obtained pursuant to Section F.2. (offset requirement)</del>. Any emissions from secondary emissions associated with the source shall be included in the determination of increment consumption.

The applicant may consume the full increment range pursuant to the requirements of Section 4F.32.