# A. PURPOSE

The purpose of this rule is:

- A.1 To establish preconstruction review requirements including offsets, Best Available Control Technology, all other applicable District Rules and Regulations, and analysis of air quality impacts for new and modified stationary sources, and to insure that the operation of such sources does not interfere with the attainment or maintenance of ambient air quality standards.
- A.2 To provide for no net increase in emissions pursuant to Section 40918 and 40920 of the California Health and Safety Code.

# B. APPLICABILITY

- B.1 This rule shall apply to all new and modified stationary sources which are subject to District permit requirements and which, after construction, emit or may emit any affected pollutants.
- B.2 If any source or modification becomes a major source or major modification solely by virtue of the relaxation of any limitation that was established after August 7, 1980, on the capacity of the source or modification to emit a federal nonattainment pollutant or its precursor such as a restriction on hours of operation, then the requirements of this rule shall apply to such a source or modification as though construction had not yet commenced on the source or modification.
- B.3 The Regulations in effect at the time any application for an Authority to Construct is deemed complete shall apply, except when a new federal requirement not yet incorporated into this rule applies to the new or modified source.
- B.4 The requirements of Sections E.1.b, E.2.a.2, E.5, E.7 and E.8 of this rule shall not apply to  $PM_{2.5}$  in the YC-MNA, if EPA re-designates Yuba City-Marysville, CA area as attainment for the federal  $PM_{2.5}$  National Ambient Air Quality Standard as codified in 40 CFR 81.305.

B.5 The requirements of Sections E.1.a, E.2.a.1, E.5, E.7 and E.8 of this rule shall not apply to Ozone or its precursors in the SBNA, if EPA re-designates Sutter County (part), CA - Sutter Buttes area as attainment for the federal ozone National Ambient Air Quality Standard as codified in 40 CFR 81.305.

# C. EFFECTIVE DATE

This rule shall become effective upon the date of adoption.

# D. DEFINITIONS

For the purpose of this rule, the definitions below shall apply:

- D.1 **Actual Emissions:** The actual rate of emissions measured or estimated which most accurately represent the emissions from an emissions unit.
- D.2 **Actual Emission Reductions:** A reduction in actual emissions from an emissions unit.
- D.3 Affected Pollutant: An air pollutant for which an ambient air quality standard has been established by the U.S. Environmental Protection Agency (EPA) or the California Air Resources Board (ARB), the precursors to such pollutants, and each pollutant listed under Section E.1 of this rule.
- D.4 Ambient Air Quality Standards: Ambient air quality standards shall be interpreted to include state and federal ambient air quality standards. For the purposes of applicability of this rule to the State Implementation Plan (SIP), all references to ambient air quality standards shall be interpreted as National Ambient Air Quality Standards.
- D.5 **Begin Actual Construction:** Initiation of physical on-site construction activities on an emissions unit which is of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation that does not involve a physical change, this term refers to those on-site

activities, other than preparatory activities, which mark the start of the change in the method of operation.

- D.6 **Best Available Control Technology (BACT):** For any emissions unit, the more stringent of:
  - a. The most effective emission control device, emission limit, or technology which has been required or used for the type of equipment comprising such emissions unit unless the applicant demonstrates to the satisfaction of the District that such limitations are not achievable; or
  - b. Any other emission control device or technique, alternative basic equipment or different fuel or process, determined by the District to be technologically feasible and cost-effective and which provides an equivalent level of control.

Under no circumstances shall BACT be determined to be less stringent than the emission control required by any applicable provision of District, state, or federal laws or regulations, unless the applicant demonstrates to the satisfaction of the APCO that such limitations are not achievable.

- D.7 Class I Area: Any area listed as Class I in 40 CFR 81.405 or an area otherwise specified as Class I in the legislation that creates a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore.
- D.8 **Commence:** As applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:
  - a. Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
  - b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- D.9 **Complete Application:** An application that contains all information required by the District to adequately evaluate the nature and extent of potential emissions from a proposed new or modified facility or emissions unit.

- Completeness shall be evaluated on the basis of a list of required information as approved by the District pursuant to Article 3, Sections 65940 through 65944 of Chapter 4.5 of Division 1 of Title 7 of the Government Code.
- D.10 Contiguous Property: Two or more parcels of land with a common boundary or separated solely by a public or private roadway or other public right-of-way.
- D.11 **Control Efficiency:** The percentage of pollutants vented to an add-on control device that are not then emitted or released to the atmosphere. Emission reductions attributed to lowering throughput rates or operating hours shall not be considered in determining control efficiency.
- D.12 **Construction:** Any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- D.13 **Cost-effective**: A cost per pound of emission reduction which is deemed to be acceptable and feasible, on a pollutant and emissions unit basis, by the APCO.
- D.14 **Daily Emissions Limitation:** One or more permit conditions specific to an emissions unit which restricts its maximum daily emissions in pounds per day, at or below the emissions associated with the maximum design capacity.
- D.15 Day: A calendar day unless otherwise indicated.
- D.16 Emission Reduction Credits (ERCs): Reductions of actual emissions certified in accordance with the requirements of this rule and the District's Banking Rules.
- D.17 Emissions Unit: An identifiable operation or piece of process equipment such as an article, machine, or other contrivance which emits, may emit, or results in the emission of any affected pollutant directly or as fugitive emissions. Emissions unit shall not include open burning of agricultural biomass.
- D.18 Enforceable: Capable of being enforced by the District and EPA, including through either the SIP or inclusion of conditions on an Authority to Construct, Permit to Operate, Determination of Compliance or Emission Reduction Credit (ERC) Certificate. For emission reduction credits not

- required to meet a federal offset requirement, a legally binding written contract may be executed with the District.
- D.19 Federally Enforceable: All limitations and conditions which are enforceable by the EPA administrator, including those requirements developed pursuant to 40 CFR parts 60, 61 and 63, requirements within the California SIP, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.
- D.20 Fluorides: Elemental fluorine and all fluoride compounds.
- D.21 Fugitive Emissions: Those emissions which can not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
- D.22 Historic Actual Emissions: Actual emissions from an existing emissions unit averaged over the two year period immediately preceding the date of application. If the last two years are unrepresentative of normal operations as determined by the APCO, then a consecutive two year period during the last five years which is representative of normal operations may be used. If, at any time during the specified period, actual emissions exceeded allowed emission levels, then actual emissions shall be reduced to reflect emission levels that would have occurred if in compliance with all applicable limitations and rules. Where an emissions unit has been in operation for less than two years, or if a seasonal source, a shorter averaging period of at least one year may be used, providing it represents the full operational history of the emissions unit. If less than one year has passed since the date of issuance of the permit to operate, then historic actual emissions shall be zero.
- D.23 **Historic Potential Emissions**: The allowable potential to emit of an existing emissions unit prior to modification. For a new emissions unit, historic potential emissions are equal to zero.
- D.24 **Impact Analysis:** An air quality modeling analysis used to estimate the maximum ground level concentration of any pollutant subject to this rule.

- D.25 Major Stationary Source: Any stationary source of air pollutants that emits, or has the potential to emit,
  - a. 100 tons per year or more of any affected pollutant; or
  - b. 25 tons per year or more of nitrogen oxides or reactive organic gases if located in the SFNA.
    The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source unless the source belongs to one of the categories of stationary sources included in 40 CFR 51.165(a)(1)(iv)(C).
- D.26 Major Modification: A modification, as defined in Section D.27, to a major stationary source in the SFNA, YC-MNA, or SBNA which results in a significant emissions increase of the nonattainment pollutant for which the source is classified as a major stationary source.
- D.27 Modification: Any physical change or operational change to an existing emissions unit, including a change in hours of operation or production rate which would necessitate a change in permit conditions. A modification to a stationary source shall include any modification of its permitted emissions units or addition of any new emissions unit. A modification also occurs when there is an increase of emissions from an emissions unit which is not subject to a daily emissions limitation. A reconstructed stationary source shall be treated as a new stationary source and not as a modification. The following shall not be considered a modification:
  - a. Routine maintenance or repair;
  - b. A change in ownership; or
  - c. Replacement of an existing emissions unit, part of an emissions unit, or emissions control device with an identical (the same in all respects except for the serial number) piece of equipment resulting in emissions less than or equal to those from the original equipment or device and not requiring a change in permit conditions.
- D.28 Necessary Preconstruction Approvals or Permits: Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the SIP.
- D.29 **Net Air Quality Benefit:** A net improvement in air quality resulting from actual emission reductions impacting the same general area affected by the new or modified source.

- D.30 Nonattainment Pollutant: Any pollutant, as well as any precursors of such pollutant, which has been designated nonattainment by the EPA in 40 CFR 81.305, or which has been designated nonattainment by the ARB pursuant to Section 39607, CH&S Code.
- D.31 Non-permitted Emissions: Those emissions of an air pollutant into open air from emission sources that are not required to have air pollution permits. Non-permitted emissions may include emissions from agricultural burning, mobile sources, exempt emission units, and sources that were never required to be permitted under the District's New Source Review Rule.
- D.32 North FRAQMD: The area of the Feather River Air Quality Management District which is north of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County, and continuing along the southern Yuba County border to Placer County (see Figure 1).
- D.33 **Offset:** An emission reduction that compensates for an emission increase of an affected pollutant from a new or modified stationary source subject to the requirements of Section E.2.
- D.34 **PM**<sub>10</sub>: Particulate matter with aerodynamic diameter smaller than or equal to a nominal 10 microns. Gaseous emissions which condense to form particulate matter at ambient temperatures shall be included.
- D.35 **PM**<sub>2.5</sub>: Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 2.5 microns. Gaseous emissions which condense to form particulate matter at ambient temperatures shall be included.
- D.36 **Permanent:** Actual emission reductions that occur for the life of the project. Except for open burning biomass ERCs, when ERCs are used as offsets, emission reductions must last the life of the new or modified source emission increases for which they are used.
- D.37 **Potential to Emit:** The maximum daily and annual capacity of an emission unit to emit a pollutant under its physical and operational design. Any physical or operational limitation on the daily and/or annual capacity of the unit to emit a pollutant, including pollution control equipment and

restrictions in hours of operation, or on the type or amount of material combusted, stored or processed, shall be treated as part of its design only if the limitation, or the effect it would have on emissions is incorporated into the applicable permit as a legally and practically enforceable permit condition.

D.38 **Precursor:** A directly emitted pollutant that, when released to the atmosphere, forms or contributes to the formation of a secondary air pollutant for which an ambient air quality standard has been adopted. The following precursor relationships shall be used:

PRECURSOR	SECONDARY AIR POLLUTANT
Reactive Organic Gases	a. Photochemical oxidants (Ozone)
	b. The organic fraction of $PM_{10}$
	a. Photochemical oxidants (Ozone)
Nitrogen Oxides	b. Nitrogen dioxide
	c. The nitrate fraction of $PM_{10}$
	d. The nitrate fraction of $PM_{2.5}$
a. Sulfur dioxide	
Sulfur Oxides	b. Sulfates
	c. The sulfate fraction of $PM_{10}$
	d. The sulfate fraction of $PM_{2.5}$

- D.39 **Proposed Emissions:** The potential to emit for a new or post-modification emissions unit or daily and annual emission rates specified in an application which will be incorporated into the permit as legally and practically enforceable permit conditions.
- D.40 **Quantifiable:** Emission reductions that can be reliably and replicably measured. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, process or production inputs, modeling, or other reasonable and measurable practices.
- D.41 Reactive Organic Gases: Any compound of carbon, excluding the following:
  - a. carbon monoxide;
  - b. carbon dioxide;
  - c. carbonic acid;
  - d. metallic carbides or carbonates;
  - e. ammonium carbonate;
  - f. methane;
  - g. methylene chloride (dichloromethane);
  - h. 1,1,1-trichloroethane (methyl chloroform);

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1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
i.
j.
     trichlorofluoromethane (CFC-11);
     dichlorodifluoromethane (CFC-12);
k.
     chlorodifluoromethane (HCFC-22);
l.
m.
     trifluoromethane (HFC-23);
     1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
n.
     chloropentafluoroethane (CFC-115);
Ο.
     1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
р.
     1,1,1,2-tetrafluoroethane (HFC-134a);
q.
     1,1-dichloro 1-fluoroethane (HCFC-141b);
r.
     1-chloro 1,1-difluoroethane (HCFC-142b);
s.
     2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
t.
     pentafluoroethane (HFC-125);
     1,1,2,2-tetrafluoroethane (HFC-134);
V.
     1,1,1-trifluoroethane (HFC-143a);
W.
х.
     1,1-difluoroethane (HFC-152a);
     cyclic, branched, or linear completely methylated
у.
     siloxanes;
     3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-
Ζ.
     225ca);
aa.
     1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-
     225cb);
bb.
     1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
CC.
     difluoromethane (HFC-32);
dd.
     ethylfluoride (HFC-161);
ee.
     1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
ff.
     1,1,2,2,3-pentafluoropropane (HFC-245ca);
     1,1,2,3,3-pentafluoropropane (HFC-245ea);
gg.
hh.
     1,1,1,2,3-pentafluoropropane (HFC-245eb);
ii. 1,1,1,3,3-pentafluoropropane (HFC-245fa);
jj. 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
kk.
    1,1,1,3,3-pentafluorobutane (HFC-365mfc);
11. chlorofluoromethane (HCFC-31);
     1-chloro-1-fluoroethane (HCFC-151a);
mm.
     1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
     1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane
00.
     (C_4F_9OCH_3 \text{ or } HFE-7100);
     2-(difluoromethoxymethyl) -1, 1, 1, 2, 3, 3, 3-
pp.
     heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>);
     1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane
qq.
     (C_4F_9OC_2H_5 \text{ or } HFE-7200);
     2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-
     heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>);
     1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-
SS.
     C_3F_7OCH_3 or HFE-7000);
     3-ethoxy-1,1,1,2,3,4,4,5,5,6,6-dodecafluoro-2-
     (trifluoromethyl) hexane (HFE-7500);
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- uu. 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea),
- vv. methyl formate (HCOOCH<sub>3</sub>);
- ww. 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4trifluoromethyl-pentane (HFE-7300);
- xx. dimethyl carbonate;
- yy. propylene carbonate;
- zz. perfluorocarbon compounds which fall into these
   classes:
  - cyclic, branched, or linear, completely fluorinated alkanes;
  - 2. cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
  - 3. cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
  - 4. sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine;
- aaa. low-reactive organic compounds which have been exempted by the U.S. EPA:
  - 1. acetone;
  - 2. ethane:
  - 3. methyl acetate;
  - 4. perchloroethylene (tetrachloroethylene); and
  - 5. parachlorobenzotrifluoride (1-chloro-4trifluoromethyl benzene);
- bbb. The following compound(s) for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to ROG and shall be uniquely identified in emission reports, but are not ROG for purposes of ROG emissions limitations or ROG content requirements:
  - 1. tertiary butyl acetate;
- D.42 **Real:** A real emission reduction means that actual air emissions are reduced.
- D.43 Reconstructed Source: Any stationary source undergoing physical modification where the fixed capital cost of the new components exceeds fifty (50) percent of the fixed capital cost of a comparable entirely new stationary source. Fixed capital cost means the capital needed to provide all the depreciable components.
- D.44 Reduced Sulfur Compounds: The sulfur compounds hydrogen sulfide, carbon disulfide, and carbonyl sulfide.

- D.45 Sacramento Federal Nonattainment Area for Ozone (SFNA): The area defined in 40 CFR Section 81.305 for the Sacramento Metro Area.
- D.46 **Seasonal Source:** Any source with more than seventy-five percent (75%) of its annual emissions within a consecutive 120 day period.
- D.47 **Shutdown:** Either the earlier of the permanent cessation of emissions from an emitting unit or the surrender of that unit's operating permit.
- D.48 **Significant:** In reference to an emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Area	Pollutant	Emissions Rate
SBNA Ozone	40 tpy of reactive organic gases or	
SDNA	SBNA Ozone	nitrogen oxides
SFNA	Ozone	25 tpy of reactive organic gases or nitrogen oxides aggregated with all other increases in potential to emit of the same pollutant over a five consecutive year period before the application for modification, including the calendar year of the most recent application
YC-MNA	PM <sub>2.5</sub>	10 tpy of direct PM <sub>2.5</sub> emissions; or 40 tpy of sulfur dioxide or nitrogen oxide emissions

- D.49 **Significant Emissions Increase:** For a nonattainment pollutant, an increase in emissions that is significant for that pollutant.
- D.50 **Stationary Source**: Any building, structure, or facility which emits or may emit any affected pollutant directly or as a fugitive emission. Building, structure, or facility means all pollutant emitting activities, including emissions units which:
  - a. Are under the same or common ownership, operation, or control, or which are owned or operated by entities which are under common control and belong to the same industrial grouping, either by virtue of falling within the same two-digit Standard Industrial Classification (SIC) Code, or by virtue of being part

- of a common industrial process, manufacturing process, or connected process involving a common raw material; and
- b. Are located on one or more contiguous or adjacent properties. On a case-by-case basis, offsite support facilities may be included when reviewing major stationary source applicability.

For purposes of Rule 10.2, open biomass burning will be considered a source and such activity requires an annual burning permit.

- D.51 **South FRAQMD:** That area of the Feather River Air Quality Management District which is south of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County, and continuing along the southern Yuba County border to Placer County (see Figure 1).
- D.52 **Surplus:** The amount of emission reductions that are, at the time of generation of an ERC, not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California SIP. Examples of federal, state, and local laws, and of SIP-related requirements, include, but are not limited to, the following:
  - a. The federally-approved California SIP;
  - b. Other adopted State air quality laws and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that:
    - the District or the State has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or
    - 2. is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;
  - c. Any other source or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and
  - d. Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 CFR Part 52, including

but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations; and assumptions used in emissions inventories.

- D.53 Sutter Buttes Nonattainment Area for Ozone (SBNA): The area defined in 40 CFR Section 81.305 for the Sutter County (part), CA Sutter Buttes area.
- D.54 **Total Reduced Sulfur Compounds:** The sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide.
- D.55 Volatile Organic Compound (VOC): Shall have the same meaning as reactive organic gases.
- D.56 Yuba City-Marysville Nonattainment Area for  $PM_{2.5}$  (YC-MNA): The area defined in 40 CFR Section 81.305 for the Yuba City-Marysville, CA area.

# E. REQUIREMENTS

Any stationary source subject to this rule shall be subject to the following requirements:

- E.1 BEST AVAILABLE CONTROL TECHNOLOGY (BACT): For each new or modified stationary source, the emission increases and the post-project potential to emit for a project, as determined pursuant to Section F of this rule, shall be used to determine BACT applicability, as follows:
  - a. For sources emitting reactive organic gases or nitrogen oxides, and located in the SFNA or SBNA portions of the FRAQMD, BACT shall apply to all emission units located at a new major source or to the modification of an existing emission unit that results in a major modification.
  - b. For sources emitting  $PM_{2.5}$  and located in the YC-MNA portion of the FRAQMD, BACT shall apply to all emission units located at a new major source or to the modification of an existing emission unit that results in a major modification.
  - c. For sources emitting reactive organic gases or nitrogen oxides, and located in the SFNA portion of

- the FRAQMD, BACT shall apply to a new or modified emission unit which results in an emission increase, if the potential to emit of the emission unit equals or exceeds 10.0 pounds per day.
- d. For sources emitting reactive organic gases or nitrogen oxides, and located in the non-SFNA portion of the FRAQMD, BACT shall apply to a new or modified emission unit which results in an emission increase, if the potential to emit of the emission unit equals or exceeds 25.0 pounds per day.
- e. For sources emitting an affected pollutant other than reactive organic gases or nitrogen oxides, and located in any portion of the FRAQMD, BACT shall apply to a new or modified emission unit that results in an emissions increase and the potential to emit of the emission unit equals or exceeds the thresholds listed in Table 1:

Table 1: BACT thresholds		
Pollutant	Pounds/Day	
Particulate matter $(PM_{10})$	80.0	
Sulfur oxides	80.0	
Carbon monoxide	500.0	
Lead	3.2	
Asbestos	0.03	
Beryllium	0.002	
Mercury	0.5	
Vinyl chloride	5.0	
Fluorides	15.0	
Sulfuric acid mist	35.0	
Hydrogen sulfide	50.0	
Total reduced sulfur compounds	50.0	
Reduced sulfur compounds	50.0	

#### E.2 **OFFSETS:**

- a. For each new or modified stationary source, the emission increases and the post-project potential to emit for a project, as determined pursuant to Section F of this rule, shall be offset as follows:
  - 1. For a project located in the SFNA or SBNA which has an emission increase of reactive organic gases or nitrogen oxides at a rate that constitutes a new major source or a major modification, shall offset the entire emission increase from the project.
  - 2. For a project located in the YC-MNA area for  $PM_{2.5}$  which has an emission increase of  $PM_{2.5}$  at a rate

- that constitutes a new major source or a major modification, shall offset the entire emission increase from the project.
- 3. For a project located in the SFNA which has a potential to emit reactive organic gases or nitrogen oxides at a rate of 10 tons per year (tpy) or more, all emission increases above 10 tpy shall be offset.
- 4. For a project located in the non-SFNA which has a potential to emit reactive organic gases or nitrogen oxides at a rate of 25 tpy or more, all emission increases above 25 tpy shall be offset.
- 5. For a project located anywhere in the District which has a potential to emit  $PM_{10}$  or a  $PM_{10}$  precursor at a rate of 25 tpy or more, all emission increases above 25 tpy shall be offset.
- b. All offsets shall be real, surplus, enforceable, quantifiable, and permanent.
- c. Offsets shall be provided on a quarterly basis in proportion to projected quarterly emission rates.
- d. All offsets shall commence not later than the initial operation of the new or modified source, and the offsets shall be maintained throughout the operation of the new or modified source which is the beneficiary of the offsets.

# e. LOCATION OF OFFSETS AND OFFSET RATIOS:

1. The applicable offset ratio shall be determined based on the location of the new or modified stationary source required to obtain offsets and the distance to the location of the emission offsets, as indicated in the following tables:

Table 2: For projects required to obtain ROG or NOx offsets pursuant to E.2.a.1 and E.2.a.3	
Location of Emission Offsets	Emission Offset Ratio
Same Source	1.3:1
Within 15-mile radius and within the same nonattainment area (i.e. SFNA or SBNA)	1.3:1
Greater than 15-mile radius, but within 50-mile radius and within the same nonattainment area (i.e. SFNA or SBNA)	1.5:1

Table 2: For projects required to obtain ROG or NOx offsets pursuant to E.2.a.1 and E.2.a.3	
Location of Emission Offsets	Emission Offset Ratio
More than 50-mile radius and within the same nonattainment area (i.e. SFNA or SBNA)	2.0:1

Table 3: For projects required to obtain PM <sub>2.5</sub> offsets pursuant to E.2.a.2	
Location of Emission Offsets	Emission Offset Ratio
Same Source	1.0:1
Within 15-mile radius and within the YC-MNA	1.2:1
Greater than 15-mile radius, but within 50-mile radius and within the YC-MNA	1.5:1
More than 50-mile radius and within the YC-MNA	2.0:1

Table 4: For projects required to obtain ROG or NOx offsets pursuant to E.2.a.4	
Location of Emission Offsets	Emission Offset
	Ratio
Same Source	1.15:1
Within 20-mile radius	1.2:1
Greater than 20-mile radius, but within 50-mile radius	1.5:1
More than 50-mile radius	2.0:1

Table 5: For projects required to obtain PM <sub>10</sub> offsets pursuant to E.2.a.5	
	Emission
Location of Emission Offsets	Offset Ratio
Same Source	1.0:1
Within 15-mile radius	1.2:1
Greater than 15-mile radius, but within 50-mile radius	1.5:1
More than 50-mile radius	2.0:1

- Offsets which are not on-site must result in a net air quality benefit, as determined by the APCO.
- 3. Offsets which are obtained from a source located in another Air District may be used only if the provisions of CH&S Code Section 40709.6 are met and the involved Air Districts enter into an agreement formalized by a memorandum of understanding.
- 4. Offsets which are used for Federal requirements in the SFNA and are obtained from a source located in another Air District within the SFNA may be used only if the provisions of Section E.2.e.3 above are met and EPA approval is obtained.
- f. INTERPOLLUTANT OFFSETS: The APCO may approve the substitution of one air contaminant for another air contaminant to meet the requirement for offsetting an emission increase on a case-by-case basis, provided that the applicant demonstrates to the satisfaction of the APCO, through the use of an impact analysis, that the emission increases from the new or modified source and offsets provided will result in a net air quality benefit and will not cause or contribute to a violation of any air quality standard.
  - 1. In such cases, the APCO may, based on an air quality analysis, impose offset ratios greater than the requirements of Section E.2.e of this rule.
  - 2. Interpollutant offsets between  $PM_{10}$  and  $PM_{10}$  precursors shall be allowed.  $PM_{10}$  emissions shall not be allowed to offset nitrogen oxide or reactive organic compound emissions.
  - 3. Interpollutant offsets between  $PM_{2.5}$  and  $PM_{2.5}$  precursors are allowed at specific ratios as approved into the SIP.
  - 4. Interpollutant offsets used for federal requirements shall also require EPA approval.
- g. Emissions of reactive organic gases during the quarters starting April 1 and July 1 may be used to offset emission increases of reactive organic gases during the quarters starting October 1 and January 1.
- h. Emissions of nitrogen oxides during the quarters starting April 1 and July 1 may be used to offset emission increases of nitrogen oxides during the quarters starting October 1 and January 1.

- E.3 AMBIENT AIR QUALITY STANDARDS: In no case shall the emissions from the new or modified stationary source cause or make worse the violation of an ambient air quality standard. The APCO may require an impact analysis to estimate the effects of a new or modified source. In making this determination the APCO shall take into account the mitigation of emissions through offsets obtained pursuant to this rule.
- E.4 **DENIAL FAILURE TO MEET STANDARDS:** The APCO shall deny any Authority to Construct or Permit to Operate if the APCO finds that the subject of the application would not comply with the standards set forth in this rule.
- E.5 COMPLIANCE BY OTHER OWNED, OPERATED, OR CONTROLLED SOURCES:

  The owner or operator of a proposed new major source or

  major modification shall certify to the APCO that all major

  stationary sources, which are owned or operated by such

  person (or by any entity controlling, controlled by, or

  under common control with such a person) in California

  which are subject to emission limitations are in

  compliance, or on a schedule for compliance, with all

  applicable emission limitations and standards.
- E.6 **RECALCULATING PM**<sub>10</sub> **FROM TOTAL SUSPENDED PARTICULATE:** The PM<sub>10</sub> emissions from an existing stationary source shall be recalculated from the Total Suspended Particulate (TSP) emissions increases and decreases which have occurred since August 20, 1983 using applicable PM<sub>10</sub> emission factors. When applicable PM<sub>10</sub> emission factors do not exist, assume 50 percent of TSP is  $PM_{10}$ .
  - If the applicant has provided full offsets for TSP emissions occurring since August 20, 1983 but before February 8, 1993, those TSP emissions need not be recalculated as  $PM_{10}$ . However, any subsequent emissions increase in  $PM_{10}$  emissions shall be subject to the offset requirements of this rule.
- E.7 ALTERNATIVE SITING: For new major sources or major modifications for which an analysis of alternative sites, sizes, and production processes is required under Section 173 of the Clean Air Act, the APCO shall require the applicant to prepare an alternative siting analysis that is functionally equivalent to the requirements of Division 13 of the Public Resources Code (California Environmental Quality Act CEQA). An Authority to Construct shall not

be issued unless the APCO has concluded, based on the information contained in the alternative siting analysis, that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

E.8 **POTENTIAL VISIBILITY IMPACTS:** The APCO shall consult with the Federal Land Manager on a proposed major stationary source or major modification that may impact visibility in any Class I Area, in accordance with 40 CFR 51.307 if the net emissions increase from the new or modified source exceeds 10 tons/year of PM<sub>2.5</sub>, 15 tons/year of PM<sub>10</sub>, or 40 tons/year of NOx; and the location of the source, relative to the closest boundary of a specified federal Class I area is within 20 miles.

#### F. CALCULATIONS

This section shall be used to determine the emissions change for all new or modified emissions units, the actual emission reductions for all shutdowns and modified emissions units and the cumulative emissions increase from all new and modified emissions units located at a stationary source.

# F.1 EMISSION CALCULATION REQUIREMENTS:

- a. For each project a separate emission calculation shall be made for each emission unit, affected pollutant emitted, and calendar quarter.
- b. If a project consists of more than one emission unit, the total emissions from all emissions units shall be summed to determine the emissions change for the project.

# F.2 EMISSIONS CHANGE CALCULATIONS:

- a. The emissions change for new emission units or stationary sources shall be the emission limits proposed in the current application.
- b. If the historic actual emissions of the emission unit being modified are more than 80% of the historic potential emissions, the emissions change shall be calculated by subtracting the historic potential emissions from the emission limits proposed in the current application.
- c. The emissions change for modified emission units shall be calculated by subtracting the historic actual

- emissions from the emission limits proposed in the current application.
- d. If the emissions change for modified emission unit(s) calculated pursuant to Section F.2.b or F.2.c above does not result in a major modification, the emissions change shall be calculated by subtracting the historic potential emissions from the emission limits proposed in the current application.
- e. The emissions change for a shutdown emissions unit shall be the historic actual emissions.
- f. The emissions change for a modification consisting solely of the installation of control equipment or implementation of a more efficient process shall be the historic actual emissions times the new overall control efficiency.

# F.3 SECTION E REQUIREMENTS BASED ON SECTION F EMISSION CALCULATIONS:

- a. The provisions of Section E.1 shall be used to determine BACT applicability.
- b. The provisions of Section E.2 shall be used to determine the quantity of offsets required.
- c. If the Section F calculation procedures determine the project will result in a decrease or no change in emissions, BACT and offsets are not required.
- F.4 DETERMINING POTENTIAL TO EMIT FOR A STATIONARY SOURCE: The potential to emit for a stationary source shall be equal to the sum of potentials to emit for each emission unit covered by permits to operate or authorities to construct, issued prior to February 8, 1993. In addition, emission increases from new or modified emissions units occurring on or after February 8, 1993 shall be added to the sum of potentials to emit for existing emissions units. The potential to emit for a stationary source shall not be adjusted for actual emissions reductions which occur after February 8, 1993.

# G. AIR QUALITY IMPACT ANALYSIS

In no case shall emissions from a new or modified emissions unit cause or make worse the violation of an ambient air quality standard. The APCO may require an applicant to use an air quality model to estimate the effects of a new or modified emissions unit or facility. For the purpose of performing an impact analysis, the following shall apply:

- G.1 Air quality models shall be based on applicable air quality model, data bases, and other requirements specified in appendix W of 40 CFR 51, unless the APCO finds that such model is inappropriate for use. After making such a finding, the APCO may designate an alternate model, after providing public notice for comment, with the concurrence of the ARB and the EPA. All modeling costs associated with the siting of a new or modified emissions unit or facility shall be borne by the applicant;
- G.2 Maximum ground level concentrations determined by modeling shall be added to background concentration levels and compared to ambient air quality standards;
- G.3 In performing an impact analysis, if the proposed stack height is higher than is dictated by good engineering practices, the actual height used for the purposes of modeling shall be calculated in accordance with good engineering practices.

# H. ADMINISTRATIVE REQUIREMENTS

The following administrative requirements shall apply to this rule:

#### H.1 COMPLETE APPLICATION:

- a. The District shall determine whether an application is complete not later than 30 days after receipt of the application, or after such longer time mutually agreeable to the applicant and the District.
- b. If the District determines that the application is not complete, the applicant shall be notified in writing of the decision and of the required additional information. Upon receipt of any resubmittal of the application, a new thirty (30) day period to determine completeness shall begin.
- c. Upon determination that the application is complete, the District shall notify the applicant in writing.
- d. The District may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.
- H.2 **PRELIMINARY DECISION:** Following acceptance of an application as complete, the District shall perform the

evaluations required to determine compliance with this rule and make a preliminary written decision as to whether an Authority to Construct should be approved, conditionally approved, or disapproved. The decision shall be supported by a written analysis.

H.3 PUBLICATION AND PUBLIC COMMENTS: Within 10 days following a preliminary decision on the Authority to Construct for an emissions unit or stationary source which triggers the offset requirements of Section E.2, or a stationary source that meets the definition of a lead point source as defined in 40 CFR 51.100(k)(2), the APCO shall publish in at least one newspaper of general circulation in the District a notice stating the preliminary decision of the APCO noting how pertinent information can be obtained, how a request for a public hearing may be made, and inviting written public comment for a 30-day period following the date of publication. Copies of such notice shall be sent to the ARB and the EPA.

#### H.4 PUBLIC INSPECTION:

- a. The APCO shall make available for public inspection at the District's office the information submitted by the applicant and the APCO's analysis no later than the time that notice of the preliminary decision is published pursuant to Section H.3.
- b. The APCO's analysis shall also be transmitted, no later than the date of publication, to the ARB and the EPA regional office.
- c. Information submitted which contains trade secrets shall be handled in accordance with Section 6254.7 of the Government Code and relevant sections of the Administrative Code of the State of California.

# H.5 AUTHORITY TO CONSTRUCT - FINAL ACTION:

- a. Within 180 days after acceptance of an application as complete, the APCO shall take final action on the application after considering all written comments.
- b. The APCO shall provide written notice of the final action to the applicant, the EPA, and the ARB, and shall make the notice and all supporting documents available for public inspection at the District's office for all Authorities to Construct issued for emissions units subject to the requirements of Section E.2 of this rule.

# H.6 REQUIREMENTS - PERMIT TO OPERATE:

- a. As a condition for the issuance of a Permit to Operate, the APCO shall require that any new source or modification, and any sources which provide offsets, be operated in the manner assumed in making the analysis to determine compliance with this rule.
- b. The Permit to Operate shall include daily emission limitations which reflect all applicable emissions limitations, including BACT.

# H.7 REQUIREMENTS - EMISSION REDUCTION CREDITS (ERCs):

- a. As a condition for the issuance of a Permit to Operate, the APCO shall ensure that the stationary source which provides emission offsets is subject to enforceable permit conditions containing specific emissions limitations and/or operational limitations which ensure that the emission reductions are permanent and practically enforceable.
- b. Where the source of offsets is a non-permitted source, the District may require the non-permitted source to obtain an enforceable permit, complete with operational and emission limitations.
- c. If the District, pursuant to state laws or District regulations, cannot permit the emissions unit, the source creating the offsets shall execute a legally binding contract between the applicant and the owner or operator of such offset source which, by its terms, shall be enforceable by the District.
- d. A violation of the emission limitation provisions of any such contract shall be chargeable to the applicant.

#### H.8 ISSUANCE - PERMIT TO OPERATE:

- a. The APCO shall only issue a Permit to Operate after determining the emission unit(s) or stationary source has meet all the requirements of this rule.
- b. The APCO shall determine that all conditions specified in the Authority to Construct have been or will be complied with by any dates specified.
- c. Where a new or modified emissions unit is, in whole or in part, a replacement for an existing emissions unit on the same property, the APCO may allow a maximum of 90 days as a start-up period for simultaneous operation of the existing emissions unit and the new replacement.

#### H.9 REGULATIONS IN FORCE GOVERN:

- a. The granting or denial of an Authority to Construct shall be governed by the requirements of this rule in force on the date the application is deemed complete, except when a new federal requirement not yet incorporated into this rule applies to the new or modified source.
- b. The APCO shall deny an Authority to Construct for any new stationary source or modification, or any portion thereof, unless the new source or modification, or applicable portion thereof, complies with the provisions of this rule and all other applicable District Rules and Regulations.

# H.10 PERMIT CONDITIONS:

- a. The APCO shall place conditions on the Authority to Construct and/or Permit to Operate which will ensure that the construction, modification, or operation of a stationary source will comply with all applicable rules and regulations.
- b. For the purpose of drafting verifiable and practical conditions such conditions may include, but not be limited to, hours of operation, processing parameters, periods of use, and emission limitations on an hourly, daily, or yearly basis.
- H.11 SHUTDOWN OF SOURCE: If the APCO determines that the unit has been removed or fallen into an inoperable and unmaintained condition, the APCO may notify the owner of intent to cancel the permit. If the owner does not respond within sixty (60) days, the APCO may cancel the permit and deem the source shutdown as of the date of last emissions.

# I. POWER PLANTS

- I.1 GENERAL: This section shall apply to all power plants proposed to be constructed in the District and for which a Notice of Intention (NOI) or Application for Certification has been accepted by the California Energy Commission (CEC). The District may apply to the CEC for reimbursement of all costs incurred, including lost fees, in order to comply with the provisions of this section.
- I.2 INTENT TO PARTICIPATE AND PRELIMINARY REPORT: Within fourteen days of receipt of a NOI, the APCO shall notify the ARB and the CEC of the District's intent to participate

in the NOI proceeding. If the District chooses to participate in the NOI proceeding, the APCO shall prepare and submit a report to the ARB and the CEC prior to the conclusion of the non-adjudicatory hearing specified in Section 25509.5 of the Public Resources Code. That report shall include, at minimum:

- a. A preliminary specific definition of BACT for the proposed facility;
- b. A preliminary discussion of whether there is substantial likelihood that the requirements of this rule and all other District regulations can be satisfied by the proposed facility; and
- c. A preliminary list of conditions which the proposed facility must meet in order to comply with this rule or any other applicable District regulation. The preliminary determinations contained in the report shall be as specific as possible within the constraints of the information contained in the NOI.

# I.3 DETERMINATION OF COMPLIANCE REVIEW:

- a. Upon receipt of an Application for Certification (AFC) for a power plant, the APCO shall conduct a Determination of Compliance review. This determination shall consist of a review identical to that which would be performed if an application for Authority to Construct had been received for the power plant.
- b. If the information contained in the AFC does not meet the requirements of this rule, the APCO shall, within twenty calendar days of receipt of the AFC, so inform the Commission, and the AFC shall be considered incomplete and returned to the applicant for resubmittal.
- I.4 EQUIVALENCY OF APPLICATION: The APCO shall consider the AFC to be equivalent to an application for Authority to Construct during the Determination of Compliance review, and shall apply all provisions of this rule which apply to an application for an Authority to Construct.
- I.5 **NEED FOR ADDITIONAL INFORMATION:** The APCO may request from the applicant any information necessary for the completion of the Determination of Compliance review. If the APCO is unable to obtain the information, the APCO may petition the presiding Commissioner of the CEC for an order directing the applicant to supply such information.

- I.6 **PRELIMINARY DETERMINATION:** Within 180 days (or within 120 days for any application filed pursuant to Sections 25540 through 25540.6 of the Public Resources Code) of an AFC having been accepted, the APCO shall make a preliminary written decision on:
  - a. Whether the proposed power plant meets the requirements of this rule and all other applicable District regulations; and
  - In the event of compliance, what permit conditions b. will be required including the specific BACT requirements and a description of required mitigation measures; or in the event of non-compliance, the specific regulations that would be violated and the basis for such determination, and those regulations with which the proposed power plant would comply, including required BACT and mitigation measures. The preliminary written decision under Section I.6 shall be treated as a preliminary decision under Section H.2 of this rule, and shall be finalized by the APCO only after being subject to the public notice and comment requirements of Sections H.3 through H.5. The APCO shall not issue a Determination of Compliance unless all requirements of this rule are met.

#### I.7 DETERMINATION OF COMPLIANCE:

- a. Within 240 days (or within 180 days for any application filed pursuant to Sections 25540 through 25540.6 of the Public Resources Code) of an AFC having been accepted the APCO shall issue and submit to the CEC a Determination of Compliance or, if such a determination cannot be issued, shall so inform the CEC.
- b. A Determination of Compliance shall confer the same rights and privileges as an Authority to Construct only when and if the CEC approves the AFC, and the CEC certificate includes all conditions of the Determination of Compliance.
- I.8 **PERMIT TO OPERATE:** Any applicant receiving a certificate from the CEC pursuant to this section and who is in compliance with all conditions of the certificate shall be issued a Permit to Operate by the APCO.

# FIGURE 1

# **SUTTER-YUBA**

