

## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

### **RULE 209-A - STANDARDS FOR AUTHORITIES TO CONSTRUCT**

*(Adopted 8/20/79; Revised 3/17/93, 5/12/93)*

#### **A. General**

The Air Pollution Control Officer shall deny an authority to construct for any new stationary source or modification, or any portion thereof, unless:

1. The new source or modification, or applicable portion thereof, complies with the provisions of this rule and all other applicable District rules and regulations and Sections 44300 (et. seq.) of the California Health and Safety Code.
2. The applicant certifies that all other stationary sources in the State which are owned or operated by the applicant are in compliance, or are on approved schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act (42 USC 7401 et. seq.) and all applicable emission limitations and standards which are part of the State Implementation Plan approved by the Environmental Protection Agency.

#### **B. Applicability and Exemptions**

1. This rule (excluding Section D) shall apply to all new stationary sources and modifications which are required pursuant to District rules to obtain a permit to construct.
2. Section (D) of this rule shall apply to new stationary sources and modifications which result in either:
  - a. A net increase in emissions of 250 or more pounds during any day of any pollutant for which there is a national ambient air quality standard (excluding carbon monoxide and particulate matter), or any precursor of such a pollutant; or
  - b. A net increase in carbon monoxide emissions which the Air Pollution Control Officer determines would cause the violation of any national ambient air quality standard for carbon monoxide at the point of maximum ground level impact; or
  - c. A net increase in emissions of 250 or more pounds during any day of particulate matter, measured as total suspended particulate from new stationary sources; or
  - d. A net increase in emissions of 80 or more pounds during any day of particulate matter measured as PM-10 (particulate matter with a nominal aerodynamic diameter less than 10 microns) from a modification to an existing stationary source that has net emissions of 250 pounds or more per day of particulate matter measured as total suspended particulate prior to the modification.
3. Any new stationary source or modification which receives a permit to construct pursuant to this rule and complying with the following two conditions shall be deemed as having met the provisions of Part C of the Clean Air Act, as amended in 1977, and any regulations adopted pursuant to those provisions.
  - a. Net emissions increase of all pollutants for which there is a national ambient air quality standard, and all precursors of such pollutants, shall be mitigated (offset) by reduced emissions from existing stationary or nonstationary sources. Emissions reductions shall be sufficient to offset any net emissions increase and shall take effect at the time of, or before, initial operation of the new source, or within 90 days after initial operations of a modification.

- b. The applicant shall demonstrate, to the satisfaction of the Air Pollution Control Officer, that the proposed new source or modification will not have a significant air quality impact on any Class I area in cases where either the Air Pollution Control Officer, the Air Resources Board, or the U. S. Environmental Protection Agency requests such a demonstration at any time during the district's review of the application for an authority to construct or within 30 days of the public notice of the Air Pollution Control Officer's decision on the application.
4. Notwithstanding the provisions of Section (B)(2), the Air Pollution Control Officer shall exempt from Section(D)(2) any new source or modification:
- a. Which will be used exclusively for providing essential public services, such as schools, hospitals, or police and fire fighting facilities, but specifically excluding sources of electrical power generation other than for emergency standby use at essential public service facilities.
  - b. Which is exclusively a modification to convert from use of a gaseous fuel to a liquid fuel because of a demonstrable shortage of gaseous fuels, provided the applicant establishes to the satisfaction of the Air Pollution Control Officer that it has made its best efforts to obtain sufficient emissions offsets pursuant to Section (D) of this rule, that such efforts had been unsuccessful as of the date the application was filed and the applicant agrees to continue to seek the necessary emissions offsets until construction on the new stationary source or modification begins. This exemption shall only apply if, at the time the permit to operate was issued for the gas burning equipment, such equipment could have burned the liquid fuel without additional controls and been in compliance with all applicable district regulations.
  - c. Which is portable sandblasting equipment used on temporary basis within the District.
  - d. Which uses innovative control equipment or processes which will likely result in a significantly lower emission rate from the stationary source than would have occurred with the use of previously recognized best available control technology, and which can be expected to serve as a model for technology to be applied to similar stationary sources within the state resulting in a substantial air quality benefit, provided the applicant establishes by modeling that the new stationary source or modification will not cause the violation of any national ambient air quality standard at the point of maximum ground level impact. This exemption shall apply only to pollutants which are controlled by the innovative control equipment or processes. The Air Pollution Control Officer shall obtain written concurrence from the Executive Officer of the Air Resources Board prior to granting an exemption pursuant to this subsection.
  - e. Which is a cogeneration project, a project using refuse-derived or biomass-derived fuels for energy generation, or a resource recovery project using municipal wastes, provided:
    - 1. the applicant establishes by modeling that the new source or modification will not cause a new violation of any national ambient air quality standard at the point of maximum ground level impact; and
    - 2. the District has established an alternative energy project offset bank which contains sufficient credits to offset the net increase in emissions from the new source modification to the extent required by Section (D)(2). For each exemption granted pursuant to this subsection, and notwithstanding Section (D) (2) (d), credits shall be withdrawn from the alternative energy project

offset bank to offset the net increase in emissions from the new source or modification at a ratio of 1.2:1. In order to establish and maintain the alternative energy project offset bank, the District may adopt rules or permit conditions which result in the cost/effective control of emissions from stationary sources throughout the District. The District shall include in the offset bank any power plant emission reductions which result from orders of the California Energy Commission or the California Public Utilities Commission. Emissions reductions which result from measures required to achieve and maintain any national ambient air quality standard, and reductions which have been proposed to offset the impact of another new source or modification for which the District has received an application, shall not be included in the offset bank. The offset bank shall not be used to offset the emissions from those portions of a new source or modification which are not directly related to energy generation.

- f. Which consists solely of the installation of air pollution control equipment which, when in operation, will directly control emissions from an existing source.
- g. Which wishes to construct in an area which has a lack of major industrial development or an absence of significant industrial particulate emissions and low urbanized population as long as the source can comply with BACT and applicable Federal, State and District emission regulations; and the impact of the emissions plus emissions from other stationary sources in the vicinity of the proposed location, along with non-rural fugitive background, will not cause a violation of state or national ambient air quality standards. This exemption shall apply only to particulate emissions.

### **C. Calculation of Emissions**

1. The maximum design capacity of a new stationary source or modification shall be used to determine the emissions from the new source or modification unless the applicant, as a condition to receiving permits to construct and operate such new source or modification, agrees to limitations on the operations of the new source or modification, in which event the limitations shall be used to establish the emissions from the new source or modification.
2. The emissions from an existing source shall be based on the specific limiting conditions set forth in the source's authority to construct and permit to operate, and, where no such conditions are specified, 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. If violations of laws, rules, regulations, permit conditions, or orders of the District, the California Air Resources Board, or the Federal Environmental Protection Agency occurred during the period used to determine the operating conditions, then adjustments to the operating conditions shall be made to determine the emissions the existing source would have caused without such violations.
3. The net increase in emissions from new stationary sources and modifications which are not seasonal sources shall be determined using yearly emissions profiles. Yearly emissions profiles for an existing or proposed stationary source or modification shall be constructed by plotting the daily emission from such source in descending order. A separate profile shall be constructed for each pollutant. If, for example, a source emits

750 lbs. of NOx one day per week, 500 lbs. of NOx two days per week and 250 lbs. of NOx on the remaining 4 days each week, then the profile will consist of 52 days at 750 lbs./day, followed by 104 days at 500 lbs./day, and then 208 days at 250 lbs./day, as shown in Figure 1. The net increase in emissions from a modification to an existing source shall be determined by comparing the yearly emissions profiles for the existing source to the yearly emissions profiles for the proposed source after modification. A net increase in emissions exists whenever any part of an

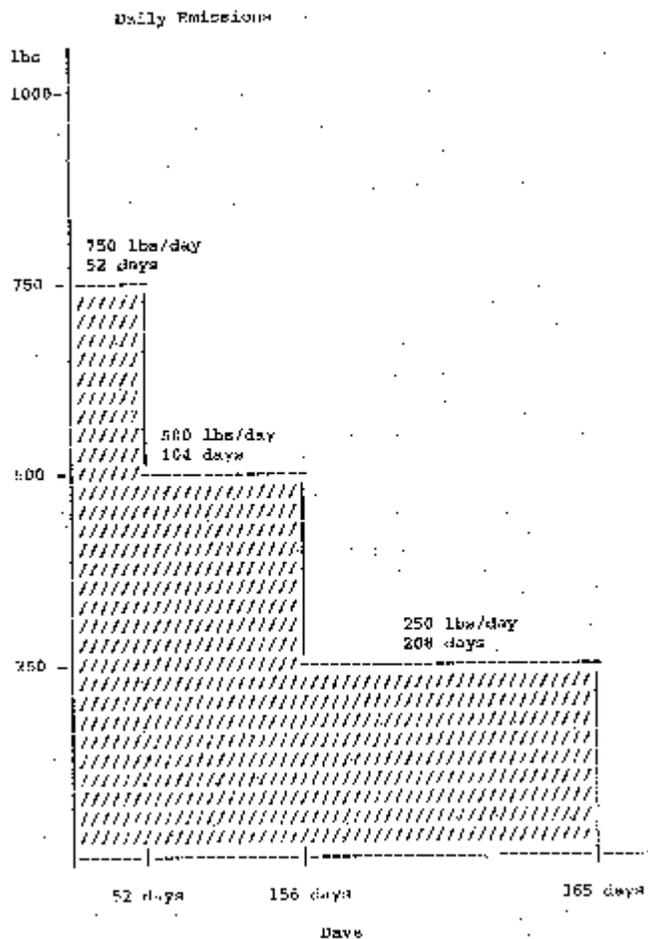


FIGURE 1. YEARLY EMISSIONS PROFILE

emissions profile for a modified source exceeds the emissions profile for the existing source.

4. The net increase in emissions from new stationary sources and modifications which are seasonal sources shall be determined using yearly and quarterly emissions profiles. Quarterly emissions profiles shall be constructed by plotting the daily emissions from an existing or proposed seasonal facility in descending order for the continuous 90 day period during which the greatest emissions from the proposed new or modified source will occur. Yearly emissions profiles shall be constructed as described in Section (C)(3). A separate profile shall be constructed for each pollutant.

The net increase in emissions from a modification to an existing seasonal source shall be determined by comparing the yearly and quarterly emissions profiles for the existing source to the yearly and quarterly emissions profiles for the proposed source after modification. A net increase in emissions exists whenever any part of an emissions profile for the modified source exceeds the emissions profile for the existing source.

5. When computing the net increase in emissions for modifications, the Air Pollution Control Officer shall take into account the cumulative net emissions changes which are represented by authorities to construct associated with the existing stationary source and issued pursuant to this rule or an equivalent regulation, excluding any emissions reductions required to comply with federal, state or district laws, rules or regulations.

#### **D. Best Available Control Technology and Mitigation Requirements**

1. **Best Available Control Technology**

All new stationary sources and modifications subject to this section, excluding cargo carriers, shall be constructed using best available control technology.

2. **Mitigation**

- a. For all new stationary sources and modifications subject to this section, mitigation shall be required for net emissions increases (i.e. increases after the application of best available control technology):

1. of each pollutant for which a national ambient air quality standard was exceeded within the air basin more than three discontinuous times (or, for annual standards, more than one time) within the three years immediately preceding the date when the application for the authority to construct was filed, and for all precursors of such pollutants; provided, however, that mitigation of net emission increases of sulfur oxides, total suspended particulates or carbon monoxide shall not be required if the applicant demonstrates through modeling that emissions from the new source or modification will not cause a new violation of any national ambient air quality standard for such pollutants, or make any existing violation of any such standard worse, at the point of maximum ground level impact.
2. not subject to Subsection (1) but which the Air Pollution Control Officer determines would cause a new violation of any national ambient air quality standard, or would make any existing violation of any such standard worse, at the point of maximum ground level impact. Emissions reductions required as a result of this subsection must be shown through modeling to preclude the new, or further worsening of any existing, violation of any national ambient air quality standard that would otherwise result from the operation of the new source or modification, unless such reductions satisfy the requirements of Section (D)(2)(b).

- b. Net emissions increases subject to Section (D)(2)(1) shall be mitigated (offset) by reduced emissions from existing stationary or nonstationary sources. Emissions reductions shall be sufficient to offset any net emissions increase and shall take effect at the time, or before initial operation, of the new source, or within 90 days after initial operation of a modification.

- c. Emissions offset profiles shall be used to determine whether proposed offsets

mitigate the net emissions increases from proposed new sources or modifications.

1. For all offset sources, a yearly emissions offset profile shall be constructed in a manner similar to that used to construct the yearly emissions profile for the proposed new or modified source. Daily emissions reductions which will result from the further control of such sources shall be plotted in descending order. A separate profile shall be constructed for each pollutant. Seasonal offsets shall not be used to mitigate the emissions from nonseasonal sources.
2. In addition, for seasonal offset sources, a quarterly emissions offset profile shall be constructed for the same time period and in the same manner as that used to construct the quarterly emissions profile for the proposed new or modified source. Daily emissions reductions which will result from further control of existing sources shall be plotted on the quarterly offset profile in descending order. A separate profile (which may cover different months) shall be plotted for each pollutant.
3. Adjusted emissions offset profiles shall be constructed by dividing each entry used in the construction of the emissions offset profiles by the offset ratio determined in Subsection (d).
4. The adjusted emission offset profiles shall be compared with the emissions profiles to determine whether net emissions increases have been mitigated at all points on the profiles.
5. For example, if emissions offsets of 900 lbs/day on 5 days per week, and 325 lbs/day the remaining 2 days per week are proposed for the new source described in Figure 1, the emissions offset profile would be as shown in Figure 2a. Further, if the offset ratio determined pursuant to Subsection (d) were 1.2:1, an adjusted emissions offset profile would be constructed as shown in Figure 2b. Finally, the adjusted emissions offset profile would be compared with the emissions profile, as shown in Figure 2c, to determine whether the net increase had been mitigated at all points on the profile.

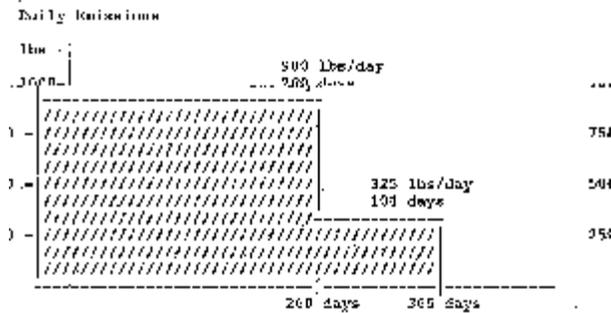


FIGURE 2a. EMISSIONS PROFILE

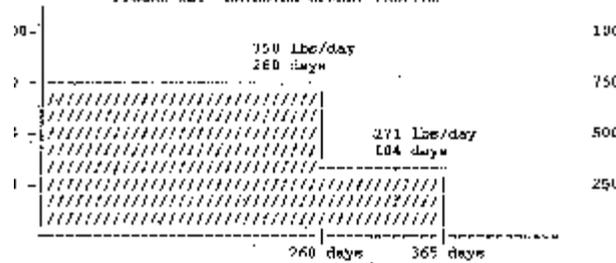


FIGURE 2b. ADJUSTED EMISSION OFFSET PROFILE

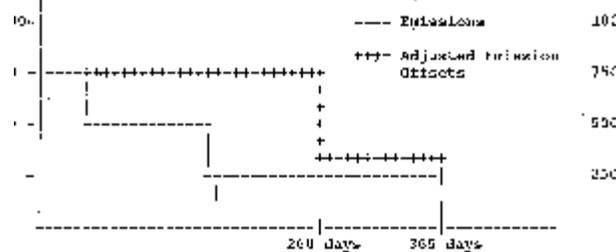


FIGURE 2c. COMPARISON OF EMISSION PROFILE AND ADJUSTED EMISSIONS OFFSET PROFILE

- d. A ratio of emissions offsets to emissions from the new source or modification (offset ratio) of 1.2:1 shall be required for emissions offsets located either:
1. Upwind in the same or adjoining counties; or
  2. Within a 15 mile radius of the proposed new source or modification.
- For emissions offsets located outside of the areas described above, the applicant shall conduct modeling to determine an offset ratio sufficient to show a net air quality benefit in the area affected by emissions from the new source or modification. Notwithstanding any other provision of this section the yearly emissions profiles and the yearly emissions offset profiles for a source subject to this section may be constructed based on the daily emissions from the source averaged on a monthly basis. In such event an offset ratio of 2.0:1 shall be required.
- e. If an applicant certifies that the proposed new source or modification is a replacement for a source which was shut down or curtailed after February 16, 1978, emissions reductions associated with such shutdown or curtailment may be used as offsets for the proposed source, subject to the other provisions of this section.

Sources which were shut down or curtailed prior to February 16, 1978 may be used to offset emissions increases for replacements for such sources, subject to the other

provisions of this section provided:

1. The shutdown or curtailment was made in good faith pursuant to an established plan approved by the Air Pollution Control Officer for replacement and emissions control, and in reliance on air pollution laws, rules and regulations applicable at the time; and
  2. The applicant demonstrates to the satisfaction of the Air Pollution Control Officer that there was good cause (which may include business or economic conditions) for delay in construction of the replacement facilities.
- f. Notwithstanding any other provisions of this section any emissions reductions not otherwise authorized by this rule may be used as offsets of emissions increases from the proposed source provided the applicant demonstrates that such reductions by emissions from the new source or modification, and provided the written concurrence of the ARB is obtained.
- g. Emissions reductions resulting from measures required by adopted federal, state, or district laws, rules or regulations shall not be allowed as emissions offsets unless a complete application incorporating such offsets was filed with the District prior to the date of adoption of the laws, rules or regulations.
- h. The Air Pollution Control Officer shall allow emissions reductions which exceed those required by this rule for a new source or modification to be banked for use in the future by the applicant. Such reductions may be used only to offset emissions increases from proposed new sources or modifications owned or operated by the applicant within 15 miles of the site where the reductions occurred. All such reductions, when used as offsets for the increased emissions from a proposed new source or modification, shall be used in accordance with the other provisions of this Section.
- i. For all power plants subject to Section (E), the applicant may, upon written notice to the Air Pollution Control Officer and the Executive Officer of the Air Resources Board, establish an emissions offset bank for a specific power plant at a specific location. The emissions offset bank shall be established no earlier than the date the applicant's Notice of Intention for the power plant is accepted by the California Energy Commission. The emissions offset bank shall lapse if the Commission rejects the applicable power plant or site; however, in such case the applicant may transfer the emissions offsets contained in the bank to another power plant and location for which the Commission has accepted a Notice of Intention. Emission offsets may be deposited in the bank only by the applicant to construct the power plant, and all emissions offsets contained in the bank shall be used in accordance with Section (D)(2).
- j. If an applicant for a resource recovery project using municipal waste demonstrates to the satisfaction of the Air Pollution Control Officer that the most likely alternative for treating such waste would result in an increase in emissions allowed under existing district permits and regulations, those emissions increases which would not occur as a result of the resource recovery project may be used to offset any net emissions increase from the resource recovery project in accordance with the other provisions of this section.
- k. Emissions reductions of one precursor may be used to offset emissions increases of another precursor of the same secondary pollutant provided the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the net

emissions increase of the latter precursor will not cause a new violation, or contribute to an existing violation, of any national ambient air quality standard at the point of maximum ground level impact. The ratio of emission reductions between precursor pollutants of the same secondary pollutant shall be determined by the Air Pollution Control Officer based on existing air quality data and subject to the approval of the Air Resources Board.

## **E. Power Plants**

This section shall apply to all power plants proposed to be constructed in the District and for which a Notice of Intention (NOI) of Application for Certification (AFC) has been accepted by the California Energy Commission. The Air Pollution Control Officer pursuant to Section 25538 of the Public Resources Code, may apply for reimbursement of all costs, including lost fees, incurred in order to comply with the provisions of this section.

1. Within fourteen days of receipt of an NOI, the Air Pollution Control Officer shall notify the ARB and the Commission of the District's intent to participate in the NOI proceedings. If the District chooses to participate in the NOI proceeding, the Air Pollution Control Officer shall prepare and submit a report to the ARB and the Commission prior to the conclusion of the nonadjudicatory hearings specified in Section 25509.5 of the Public Resources Code. That report shall include, at a minimum:
  - a. A preliminary specific definition of best available control technology (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;
  - 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.

2. Upon receipt of an Application for Certification (AFC) for a power plant, the Air Pollution Control Officer 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 an authority to construct had been received for the power plant. If the information contained in the AFC does not meet the requirements of Section (E) of this rule, the Air Pollution Control Officer shall, within 20 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.
3. The Air Pollution Control Officer shall consider the AFC to be equivalent to an application for an authority to construct during the Determination of Compliance review, and shall apply all provisions of this rule which apply to applications for an authority to construct.
4. The Air Pollution Control Officer may request from the applicant any information necessary for the completion of the Determination of Compliance review. If the Air Pollution Control Officer is unable to obtain the information, the Air Pollution Control Officer may petition the presiding Commissioner for an order directing the applicant to supply such information.
5. Within 180 days of accepting an AFC as complete, the Air Pollution Control Officer shall

make a preliminary decision on:

- a. Whether the proposed power plant meets the requirements of this rule and all other applicable district regulations; and
  - b. In the event of compliance, what permit conditions will be required including the specific BACT requirements and a description of required mitigation measures.
6. The preliminary written decision made under Subsection (5) shall be treated as a preliminary decision under Subsection (G)(2)(a) of this rule, and shall be finalized by the Air Pollution Control Officer only after being subject to the public notice and comment requirements of Subsection (G)(2)(b) through (G)(2)(f). The Air Pollution Control Officer shall not issue a Determination of Compliance unless all requirements of this rule are met.
  7. Within 240 days of the filing date, the Air Pollution Control Officer shall issue and submit to the Commission a Determination of Compliance or, if such a determination cannot be issued, shall so inform the Commission. A Determination of Compliance shall confer the same rights and privileges as an authority to construct only when and if the Commission approves the AFC, and the Commission certificate includes all conditions of the Determination of Compliance.
  8. Any applicant receiving a certificate from the Commission pursuant to this section and in compliance with all conditions of the certificate shall be issued a permit to operate by the Air Pollution Control Officer.

## **F. Definitions**

1. "Best Available Control Technology (BACT)" means for any source the more stringent of:
  - a. The most effective emissions control technique which has been achieved in practice, for such category or class of source; or
  - b. Any other emissions control technique found, after public hearing, by the Air Pollution Control Officer or the Air Resources Board to be technologically feasible and cost/effective for such class or category of sources or for a specific source; or
  - c. The most effective emission limitation which the EPA certifies is contained in the implementation plan of any State approved under the Clean Air Act for such class or category or source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable.

In no event shall the emission rate reflected by the control technique or limitation exceed the amount allowable under applicable new source performance standards.

2. "Modification" means any physical change in, change in method of operation of, or addition to an existing stationary source, except that routine maintenance or repair shall not be considered to be a physical change. A change in the method of operation, unless previously limited by an enforceable permit condition, shall not include:
  - a. An increase in the production rate, if such increase does not exceed the operating design capacity of the source.
  - b. An increase in the hours of operation.
  - c. Change in ownership of a source.
3. "Stationary Source" means any aggregation of air- contaminant-emitting equipment which includes any structure, building, facility, equipment, installation or operation (or aggregation thereof) which is located on one or more bordering properties within the District and which is owned, operated, or under shared entitlement to use by the same person. Items of air-contaminant-emitting equipment shall be considered aggregated into

the same stationary source, and items of non-air-contaminant-emitting equipment shall be considered associated with air-contaminant-emitting equipment only if:

- a. The operation of each item of equipment is dependent upon, or affects the process of, the other; and
  - b. The operation of all such items of equipment involves a common raw material or product. Emissions from all such aggregated items of air-contaminant-emitting equipment and all such associated items of non-air-contaminant-emitting equipment of a stationary source shall be considered emissions of the same stationary source. The emissions from all cargo carriers (excluding motor vehicles) while operating within the Air Basin which load or unload at the source shall be considered as emissions from the stationary source.
4. "Precursor" means a directly emitted pollutant that, when released to the atmosphere, forms or causes to be formed or contributes to the formation of a secondary pollutant for which an ambient air quality standard has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more ambient air quality standards. The following precursor-secondary pollutant relationships shall be used for purposes of this rule:

**Precursors**

Hydrocarbons and substituted  
Hydrocarbons (reactive organic gases)

Nitrogen oxides (NO<sub>x</sub>)

Sulfur oxides (SO<sub>x</sub>)

**Secondary Pollutants**

a. photochemical oxidant (ozone)

b. the organic fraction of  
suspended particulate matter

a. Nitrogen dioxide (NO<sub>2</sub>)

b. the nitrate fraction of suspended  
particulate matter

a. sulfur dioxide (SO<sub>2</sub>)

b. sulfates (SO<sub>4</sub>)

c. the sulfate fraction of  
suspended particulate matter

5. "Seasonal source" means any source with more than 75 percent of its annual operating hours within a consecutive 90-day period.
6. The "upwind" area shall be bounded by a line drawn perpendicular to the predominant wind flow line passing through or nearest to the site of the new source or modification and extending to the boundaries of the same or adjoining counties within the same air basin except where the APCO determines that for reasons of topography or meteorology such a definition is inappropriate.
7. "Modeling" means using an air quality simulation model, based on specified assumptions and data, which has been approved in writing by the Executive Officer of the Air Resources Board.

**G. Severability**

If any portion of this rule is found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the rule, which shall continue to be in full force and effect.