#### REGULATION XII. TOXIC AIR CONTAMINANTS

(Adopted & Effective 3/6/90: Revision Effective 6/12/96)

### RULE 1200. TOXIC AIR CONTAMINANTS - NEW SOURCE REVIEW (Adopted and Effective 6/12/96; Revision Effective 6/12/96)

#### (a) APPLICABILITY

Except as provided in Section (b) of this rule, this rule applies to any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminant(s) and for which an Authority to Construct or Permit to Operate is required pursuant to Rule 10, or for which a Notice of Intention or Application for Certification has been accepted by the California Energy Commission. An Application for Certification shall be considered equivalent to an application for an Authority to Construct. Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

#### (b) **EXEMPTIONS**

- (1) The standards of Section (d) shall not apply to:
- (i) The modification of an emission unit made exclusively to comply with the Maximum Achievable Control Technology (MACT) requirements adopted pursuant to either Section 111 or 112 of the Federal Clean Air Act or to comply with requirements of these rules and regulations adopted to implement federal MACT requirements.
- (ii) The modification of an emission unit made exclusively to comply with a state Air Toxic Control Measure (ATCM) required by Division 26, Part 2, Chapter 3.5 of the California Health and Safety Code (AB 1807 program) or to comply with a requirement of these rules and regulations adopted to implement state ATCM requirements.
- (iii) An existing emission unit requiring a permit solely because of changes to Rule 11 of these rules and regulations provided the application for permit is submitted within one-year after the applicable change to Rule 11 is adopted.
- (iv) The modification of an emission unit made exclusively to implement a District approved risk reduction plan required by Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program) or to comply with a requirement of these rules and regulations adopted to implement state SB 1731 program requirements.

- (v) The following emission units provided the resulting increase in maximum incremental cancer risk at every receptor location is less than 100 in one million, the total acute noncancer health hazard index is less than 10 and the total chronic noncancer health hazard index is less than 10:
  - (A) Dry cleaning emission units, provided that Toxics Best Available Control Technology (T-BACT) will be installed.
  - (B) Gasoline service station emission units, provided that T-BACT will be installed.
    - (C) Asphalt roofing kettles and tanks.
  - (D) Automotive refinishing operations not using chrome or lead pigmented coatings.
  - (E) Emission units used for wood product stripping operations, provided that T-BACT will be installed.
- (2) The standards of Subsections (d)(1) and (d)(3) shall not apply to the modification of an emission unit made exclusively to comply with a requirement of these rules and regulations, but not including Rule 1200. The Air Pollution Control Officer may determine for good cause, on a case-by-case basis, that this exemption does not apply to a modified emission unit. In the event such a determination is made, written notice shall be provided by the Air Pollution Control Officer to the project applicant as soon as possible and before the application is deemed complete pursuant to Rule 18. This notice shall state the specific reason why the Air Pollution Control Officer has determined that this exemption does not apply and shall specify what additional requirements the project applicant must meet.

#### (c) **DEFINITIONS**

- (1) "Air Toxic Control Measure (ATCM)" means a requirement to reduce emissions of one or more toxic air contaminants developed pursuant to Division 26, Part 2, Chapter 3.5 of the California Health and Safety Code (AB 1807 program).
- (2) "Cancer Burden" means the estimated potential increase in the occurrence of cancer cases in a population subject to an incremental cancer risk of greater than one in one million resulting from exposure to toxic air contaminants. It shall be calculated pursuant to Section (e).
- (3) "Concurrent Emission Reductions" means permanent, quantifiable, enforceable, and surplus emission reductions occurring at the same stationary source and within the six months prior to or at the same time as the commencement of operations of new or modified emission units constituting a project. Emission reductions resulting from the

shutdown of an emission unit are eligible to be concurrent emission reductions. Concurrent emission reductions shall be calculated pursuant to Section (e).

Notwithstanding the definition of "Surplus," emission reductions required by Section 111 or 112 (MACT) of the federal Clean Air Act, or Division 26, Part 2, Chapter 3.5 (ATCM) of the California Health and Safety Code may be used as concurrent emission reductions if they occur before they are required by the applicable MACT or ATCM. However, their use as concurrent emission reductions shall expire on the date the reductions required by the applicable MACT or ATCM are actually required to take place. The Permit to Operate for any emission unit which has used such an emission reduction to satisfy in whole or in part the requirements of this rule, shall expire and become null and void on the date that the reductions required by the applicable MACT or ATCM are actually required to take place, unless additional concurrent emission reductions are provided in an amount necessary to satisfy the requirements of this rule.

- (4) "Contiguous Property" means the same as defined in Rule 2 of these Rules and Regulations.
- (5) "Emission Unit" means any article, machine, equipment, contrivance, process or process line which emits or may emit one or more toxic air contaminants.
- (6) "Enforceable" means can be enforced by the District through inclusion of conditions on a valid and current permit.
- (7) "Future Potentially Feasible Cancer Risk Reduction Measure" means control measures and techniques that are in excess of T-BACT and are expected to be technologically feasible and economically practicable in the future. They include, but are not limited to, pollution prevention measures such as product substitution or modification, process modification, feedstock modification, operational and maintenance improvements; changes in basic control equipment; and enclosing systems or processes to reduce emissions. Future potentially feasible cancer risk reduction measures are different from T-BACT in that they apply to existing permit units. Future potentially feasible cancer risk reduction measures are determined on a case-by-case basis.
- (8) "Maximum Achievable Control Technology (MACT)" means emission controls or limitations included in any Section 112 requirement of the federal Clean Air Act, including any implementing regulations of the U.S. Environmental Protection Agency, for any source class or category.
- (9) "Maximum Incremental Cancer Risk" (MICR) means the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminant(s). It shall be calculated pursuant to Section (e) and using net emission increases from the project or emission unit.
- (10) "Modified Emission Unit" means an emission unit which undergoes any physical or operational change which results or may result in an increase in an emission unit's toxic air contaminant potential to emit, including toxic air contaminants not previ-

ously emitted. An emission unit which undergoes the following shall not be considered a modified emission unit, provided such change is not contrary to any permit condition, and the change does not result in an increase in the toxic air contaminant potential to emit of any toxic air contaminant:

- (i) The movement of a portable emission unit from one stationary source to another.
  - (ii) Repair or routine maintenance.
  - (iii) An increase in the hours of operation.
  - (iv) Use of alternate fuel or raw material.
- (11) "Permanent" means enforceable and which will exist for the life of the project or emission unit, as may be limited by enforceable permit conditions.
- (12) "Post-Project Potential To Emit" means a project's or emission unit's potential to emit after issuance of an Authority to Construct for the proposed project or emission unit, calculated pursuant to Section (e).
- (13) "Potential to Emit" means the maximum quantity of toxic air contaminant emissions, including fugitive emissions, that a project or emission unit is capable of emitting considering emission control equipment and calculated pursuant to Section (e).
- (14) "Pre-Project Potential To Emit" means a project's or emission unit's potential to emit prior to issuance of an Authority to Construct for the proposed project or emission unit, calculated pursuant to Section (e).
- (15) "Project" means an emission unit or aggregation of emission units located at a stationary source for which an application or combination of applications for Authority to Construct or modified Permit to Operate are under District review. It includes any emission unit(s) modified to provide concurrent emission reductions.
- (16) "Quantifiable" means that a reliable basis for calculating the amount, rate, nature and characteristics of an emission change can be established, as determined by the Air Pollution Control Officer.
- (17) "Receptor Location" means any location beyond the project's or emission unit's stationary source boundaries where the Air Pollution Control Officer has determined exposure to the project's or emission unit's (not including any emission unit modified to provide concurrent emission reductions) emissions could reasonably occur.
- (18) "Relocated" means moved within San Diego County from one stationary source to another stationary source.

- (19) "Stationary Source" means the same as defined in Rule 2 of these Rules and Regulations.
- (20) "Surplus" means in excess of any emission reductions which are required by this rule, or which are required by or which the Air Pollution Control Officer reasonably expects will be required by Section 111 or 112 (MACT) of the federal Clean Air Act, or Division 26, Part 2, Chapter 3.5 (ATCM) of the California Health and Safety Code.

Emission reductions used as concurrent emission reductions as part of a project or emission unit subject to the requirements of this rule which occur before the Air Pollution Control Officer reasonably expects they will be required by Section 111 or 112 (MACT) of the federal Clean Air Act, or Division 26, Part 2, Chapter 3.5 (ATCM) of the California Health and Safety Code shall be deemed to be permanently surplus. Emission reductions occurring before December 12, 1995 are not surplus.

Emission reductions associated with Section 111 or 112 (MACT) of the federal Clean Air Act, or Division 26, Part 2, Chapter 3.5 (ATCM) of the California Health and Safety Code and which have been publicly noticed to be required by the federal Environmental Protection Agency (EPA) or the California Air Resources Board (ARB), as applicable, may be deemed to be reasonably expected to occur by the Air Pollution Control Officer. If subsequent public notice is given by such agency that such emission reductions will not be required, such emission reductions shall be deemed to be surplus.

- (21) "Total Acute Noncancer Health Hazard Index" means the estimated potential risk of acute public health effects and is the sum of the individual substance acute health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants identified in Table III. It shall be calculated using net emission increases from the project or emission unit. It shall be calculated pursuant to Section (e).
- (22) "Total Chronic Noncancer Health Hazard Index" means the estimated potential risk of chronic public health effects and is the sum of the individual substance chronic health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants identified in Table II. It shall be calculated using net emission increases from the project or emission unit. It shall be calculated pursuant to Section (e).
- (23) "Toxic Air Contaminant (TAC)" means the air contaminants listed in Table I (carcinogenic), Table II (noncarcinogenic chronic) or Table III (noncarcinogenic acute) which have a health standard, approved by the state Office of Environmental Health Hazard Assessment (OEHHA) and listed in the California Air Pollution Control Officers Association (CAPCOA) Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993 or listed in any health risk assessment guidelines adopted by OEHHA, pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 procedures), that replaces all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993.

The Air Pollution Control Officer may revise Tables I, II, or III upon OEHHA adoption of revised CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines or upon OEHHA adoption of any health risk assessment guidelines or revisions pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 procedures), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993, or with the concurrence of OEHHA and 30 days after public notice of the proposed changes is published in a newspaper of general circulation. A member of the public may petition the Air Pollution Control Officer to add air contaminants to these tables.

- (24) "Toxics Best Available Control Technology (T-BACT)" means the most effective emission limitation or emission control device or control technique which:
  - (i) has been achieved in practice for that source or category of source; or
  - (ii) is any other emissions limitation or control technique, including process and equipment changes of basic and control equipment and implementation of pollution prevention measures, found by the Air Pollution Control Officer to be technologically feasible for that source or category of source, or for a specific source. If there is an applicable MACT standard, the Air Pollution Control Officer shall evaluate it for equivalency with T-BACT.

#### (d) STANDARDS

The Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new, relocated, or modified emission unit increasing emissions of one or more toxic air contaminants listed in Tables I, II, or III unless all of the following requirements are met:

#### (1) Cancer Risk

- (i) <u>T-BACT Not Applied.</u> The increase in maximum incremental cancer risk at every receptor location is equal to or less than one in one million for any project for which new, relocated, or modified emission units that increases maximum incremental cancer risk are not equipped with T-BACT; and
- (ii) <u>T-BACT Applied.</u> Except as provided in (d)(1)(iii), the increase in maximum incremental cancer risk at every receptor location is equal to or less than 10 in one million for any project for which all new, relocated, or modified emission units that increases maximum incremental cancer risk are equipped with T-BACT.
- (iii) Maximum Incremental Cancer Risk Greater Than 10 in One Million.

  The Air Pollution Control Officer may grant an Authority to Construct and/or Permit to Operate for a new, relocated, or modified emission unit with an increase in maximum incremental cancer risk at any receptor location of greater than 10 in one million but less than 100 in one million provided all of the following conditions are met:

- (A) All new, relocated, or modified emission unit(s) associated with the project that increase maximum incremental cancer risk by more than one in one million are equipped with T-BACT.
- (B) The Air Pollution Control Officer prepares a report in support of approving an Authority to Construct for the project. The following information shall be included in the report and shall be provided by the project applicant in report format to the satisfaction of the Air Pollution Control Officer:
  - (1) Identification of the toxic air contaminants that would be emitted.
  - (2) Identification of the cancer and noncancer (chronic and acute) health impacts of the toxic air contaminants that would be emitted.
  - (3) A discussion of any uncertainty associated with the risk assessment that the applicant believes is noteworthy.
  - (4) A discussion of the benefits associated with the new or modified project (any emission unit modified to provide concurrent emission reductions need not be included).
  - (5) A discussion of any local, state or federal mandates requiring the new or modified project (any emission unit modified to provide concurrent emission reductions need not be included).
  - (6) Identification of project impacts on environmental media other than air.
  - (7) Identification of all sensitive receptors impacted by the new or modified project (any emission unit modified to provide concurrent emission reductions need not be included).
  - (8) A discussion of how the stationary source will comply with all applicable MACT and ATCM requirements at the time of Authority to Construct issuance.
  - (9) A demonstration that the cancer burden as a result of the project will not exceed 1.0.
  - (10) A cancer risk reduction plan for the project (any emission unit modified to provide concurrent emission reductions need not be included) to include the following information:

- (i) Identification of the processes and activities causing the toxic air contaminant emissions from the project and what portion of the total project risk is due to each.
- (ii) Identification of all future potentially feasible cancer risk reduction measures for the project type.
- (iii) An estimate of the risk reduction potential of all future potentially feasible cancer risk reduction measures.
- (iv) An estimate of how long it would take to implement all future potentially feasible cancer risk reduction measures.
- (v) A determination of the technical feasibility and costeffectiveness to implement all future potentially feasible cancer risk reduction measures.
- (vi) Identification of and a commitment to implement future potentially feasible cancer risk reduction measures for the project to reduce the maximum incremental cancer risk increase from the project to 10 in one million or less, and a detailed schedule for implementation.
- (11) A discussion of how each requirement of Subsections (d)(1)(iii), (d)(2), and (d)(3) will be met.

The report required by this Subsection shall be available in draft form for public review at the Air Pollution Control District and at a minimum of one public library (to be determined by the Air Pollution Control Officer) near affected persons for the 30 days required by Subsection (d)(1)(iii)(J) before it is finalized.

- (C) The Air Pollution Control Officer will include in any Authority to Construct that is issued for the project a condition(s) requiring implementation of the future potentially feasible cancer risk reduction measures the project applicant committed to implement pursuant to the requirement of Subsection (d)(1)(iii) (B)(10)(vi).
- (D) If the project is a modification of an existing stationary source emitting one or more toxic air contaminant(s), T-BACT shall be installed on all permitted emission units at the stationary source that have a maximum incremental cancer risk impact of greater than 10 in one million at any receptor location where the increase in maximum incremental cancer risk as a result of the project is greater than 10 in one million. The Air Pollution Control Officer shall not consider emission units modified to comply with this requirement as part of the project unless specifically requested to do so by the project applicant. Emissions and risk impact data to be used for such impact

determinations from non-project emission units shall be from the District program to implement Section 44362 of Division 26 (AB 2588) of the California Health and Safety Code, as such data exists on the date a complete permit application for the project is filed with the District, unless the Air Pollution Control Officer approves the use of other emissions and risk impact data as being more representative.

- (E) If the increase in maximum incremental cancer risk as a result of the project is greater than 50 in one million at any receptor location,
  - (1) all available cancer risk reductions shall be provided from permitted emission units:
    - (i) located at stationary sources other than the stationary source where the project is located or will be located (e.g. off-site emission reductions), and
    - (ii) which have a maximum incremental cancer risk impact of greater than 10 in one million at any receptor location where the maximum incremental cancer risk impact as a result of the project is greater than 10 in one million;

or,

(2) cancer risk reductions shall be provided until the increase in maximum incremental cancer risk from the project at all receptor locations is equal to or less than 10 in one million.

Emissions and risk impact data to be used for such impact determinations shall be from the District program to implement Section 44362 of Division 26 (AB 2588) of the California Health and Safety Code, as such data exists on the date a complete permit application for the project is filed with the District, unless the Air Pollution Control Officer approves the use of other emissions and risk impact data as being more representative.

Cancer risk reductions from any single emission unit required by this Subsection (d)(1)(iii)(E) shall not be required if the project applicant demonstrates to the satisfaction of the Air Pollution Control Officer that the annualized cost of such cancer risk reduction (from such single emission unit) per unit of maximum incremental cancer risk reduced is greater than 1.25 times the annualized cost per unit of maximum incremental cancer risk reduced by T-BACT for the project (not including any emission unit modified to provide concurrent emission reductions).

All emission reductions provided pursuant to this subsection shall be enforceable, permanent, and quantifiable. The stationary source operator shall demonstrate to the satisfaction of the Air Pollution Control Officer that the requirements of this subsection have been met. If emission reductions from permitted units are provided such that the resulting maximum incremental cancer risk from the project at all receptor locations within the project impact area is equal to or less than 10 in one million, the requirements of Subsections (d)(1)(iii)(B), (D), (F), (I), and (J) shall not apply.

- (F) The stationary source operator will prepare an annual report on risk reduction methods, including pollution prevention, available for reducing the resulting project (not including any emission unit modified to provide concurrent emission reductions) maximum incremental cancer risk for affected emission units to less than or equal to 10 in one million. Such report shall meet the same requirements as established for the District's program to implement Division 26, Part 6, Chapter 6 (SB 1731 risk reduction program) of the California Health and Safety Code. The stationary source operator shall implement the approved risk reduction methods within one year from the date of approval by the District.
- (G) The stationary source is in compliance with all applicable MACT and ATCM requirements at the time of Authority to Construct issuance.
- (H) The cancer burden as a result of the project is equal to or less than 1.0.
- (I) The stationary source operator will notify affected persons of the project and, after providing a minimum 30 day notice, hold a public meeting (in the area affected by the project) to discuss the project. Notification shall be in writing and shall meet the same requirements as established for District notification procedures to implement Section 44362 of Division 26 (AB 2588 Air Toxics Hot Spots notification program) of the California Health and Safety Code.
- (J) After written notice is provided to affected persons, the Air Pollution Control Officer has provided a 30 day period for the public to submit written comments on the following as they relate to the project:
  - (1) Does the project meet all applicable federal, state and Air Pollution Control District requirements;
  - (2) Are there any special considerations in the affected community that warrant disapproval of the project;
    - (3) Are there alternative processes or control technologies that should be considered;

- (4) Are the applicable terms and conditions of the proposed permit enforceable by the Air Pollution Control Officer; and,
  - (5) Was proper public notice provided regarding the project?

Written notice of the proposed project and comment period shall be prepared by the Air Pollution Control Officer and shall include notice that the draft report required by Subsection (d)(1)(iii)(B) and the Air Pollution Control Officer's analysis of the project are available for public review at the Air Pollution Control District and at a minimum of one specified public library (to be determined by the Air Pollution Control Officer) near the affected persons. The notice shall be provided to affected persons by the stationary source operator at the same time as the notice required by Subsection (d)(1)(iii)(I) is provided to affected persons.

#### (2) Total Acute Noncancer Health Risk

The increase in the total acute noncancer health hazard index at every receptor location as a result of the project is equal to or less than one unless the Air Pollution Control Officer, after consulting with the state OEHHA, determines that an alternate total acute noncancer health hazard index is sufficiently health protective. In such case, the increase in total acute noncancer health hazard index shall be limited to the alternative total acute noncancer health hazard index at every receptor location.

### (3) Total Chronic Noncancer Health Risk

The increase in the total chronic noncancer health hazard index at every receptor location as a result of the project is equal to or less than one unless the Air Pollution Control Officer, after consulting with the state OEHHA, determines that an alternate total chronic noncancer health hazard index is sufficiently health protective. In such case, the increase in total chronic noncancer health hazard index shall be limited to the alternative total chronic noncancer health hazard index at every receptor location.

### (e) PROCEDURES

(1) Health risk estimates shall be performed for toxic air contaminants listed in Tables I, II, III using corresponding state OEHHA health risk values in effect on the date action on the application(s) is taken. In the event health risk values are added or revised by OEHHA after the application is deemed complete pursuant to Rule 18, the Air Pollution Control Officer shall advise the project applicant in writing as soon as possible thereafter. The project applicant shall make the necessary changes to the health risk estimates to incorporate the new or revised health risk values and submit them to the Air Pollution Control Officer. However, if requested to do so by the project applicant, the Air Pollution Control Officer (in lieu of the project applicant) shall make the necessary changes to the health risk estimates to incorporate the new or revised health risk values.

(2) The Air Pollution Control Officer shall estimate health risk (cancer and non-cancer) and cancer burden in accordance with procedures specified in the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993 or specified in any health risk assessment guidelines adopted by the state OEHHA, pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993.

#### (3) Exposure Periods of Concern

Total chronic noncancer health risk and maximum incremental cancer risk estimates shall be calculated based on the project's or emission unit's emission increase in annual toxic air contaminant potential to emit. Total acute noncancer health risk estimates shall be based on the project's or emission unit's emission increase in toxic air contaminant potential to emit for the exposure period of concern.

#### (4) Calculation of Emission Increases

Emission increases from a new or relocated project or emission unit shall be calculated as the new project's or emission unit's post project potential to emit. Emission increases from a modified project or emission unit shall be calculated as the project's or emission unit's post project potential to emit minus its pre-project potential to emit.

#### (5) Calculation of Potential to Emit

Except as provided in (i) and (ii) below, the potential to emit shall be calculated based on the maximum design capacity or other operating conditions which reflect the maximum potential emissions, including fugitive emissions.

- (i) Permit Limitations Shall Be Used: If specific limiting conditions contained in an Authority to Construct or Permit to Operate restrict or will restrict emissions to a lower level, these limitations shall be used to calculate the potential to emit.
- (ii) Potential to Emit Shall Not Exceed Maximum Potential: If specific conditions limiting a project's or emission unit's pre-project potential to emit are not contained in an Authority to Construct or a Permit to Operate, the pre-project potential to emit shall be limited to the project's or emission unit's actual emissions only to the extent that such emissions do not violate any District, state or federal law, rule, regulation, order or permit condition.

For purposes of this requirement, the Air Pollution Control Officer may allow the pre-project potential to emit to be based on the highest level of actual emissions occurring during a consecutive one-year period within the five-year period preceding the receipt date of the application to the extent that the emission level was not in excess of any District, state or federal law, rule, regulation, order or permit condition.

- (6) Calculation of Actual Emissions for Determining Emission Reductions
- (i) Actual emissions of an existing emission unit shall be averaged over the most representative two consecutive years within the five years preceding the receipt date of an application, as determined by the Air Pollution Control Officer. Such actual emissions shall not include emissions in excess of any District, state or federal law, rule, regulation, order or permit condition.
- (ii) For emission units that have not been operated for a consecutive two-year period, which is representative of actual operations within the five years preceding the receipt date of the application, the calculation of actual emissions shall be based on the average of any two one-year operating periods determined by the Air Pollution Control Officer to be representative within that five-year period. If a representative two-year time period or two one-year time period does not exist, the calculation of actual emissions shall be based on the average of the total operational time period within that five-year period.
- (iii) Actual emissions for emission units operated for a period of less than six months shall be based on an average over the longest operating time period determined by the Air Pollution Control Officer to be most representative of actual operations.
- (7) When concurrent emission reductions are provided, the resulting reduction in health risk at each evaluated receptor location shall be subtracted from the health risk increase at the same receptor location to provide a net health risk as a result of the project at each such receptor location.

Total chronic noncancer health risk and maximum incremental cancer risk reduction estimates shall be calculated based on the project's or emission unit's annual emission reduction in toxic air contaminants. Total acute noncancer health risk reduction estimates shall be based on the project's or emission unit's emission reduction in toxic air contaminants for the exposure period of concern.

In order for an emission reduction to qualify as a concurrent emission reduction when determining the net acute noncancer health risk as a result of a project or emission unit, the applicant shall demonstrate that there will be a resulting health risk reduction to mitigate emission increases from the project or emission unit for each and every acute time period of concern.

#### (8) Calculation of Emission Reductions

(i) An actual emission reduction may only be used as a concurrent emission reduction. Actual emissions calculated pursuant to Subsection (e)(6) shall be used for purposes of determining an actual emission reduction in accordance with this Subsection (e)(8). An actual emission reduction must be quantifiable, enforceable and surplus and may be temporary or permanent in duration. A temporary actual

emission reduction shall be identified as temporary and shall include a specific date beyond which the reductions are no longer valid.

- (A) Actual emission reductions from the shutdown or relocation of an emission unit shall be calculated based on the emission unit's pre-project actual emissions.
- (B) Actual emission reductions from a modified project or emission unit shall be calculated as the project's or emission unit's pre-project actual emissions minus the project's or emission unit's post-project potential to emit.
- (ii) Adjustment for Determining Actual Emission Reduction: If an emission unit has been permitted and operated for a period of less than two years, the emission unit's actual emissions, for purposes of determining decreases in cancer risk or noncancer chronic risk, shall be calculated as the unit's actual emissions over the actual operating time period times the actual operating time period in days divided by 1460.
  - (iii) If an emission unit was operated in violation of any District, state or federal law, rule, regulation, order, or permit condition during the period used to determine actual emissions, the actual emissions shall be adjusted to reflect the level of emissions which would have occurred if the emission unit had not been in violation.
  - (9) When concurrent emission reductions are provided, the project applicant shall apply for and the Air Pollution Control Officer shall approve or deny, as appropriate, an Authority to Construct and a new or modified Permit to Operate with appropriate conditions for the emission unit(s) providing the concurrent emission reductions, or retire a Permit to Operate for the emission unit(s) in the event of a shutdown.
  - (10) Toxic air contaminant exposure scenarios used to estimate health risk shall be consistent with land use designations at the time the application is deemed complete, except where the project owner has direct control over discretionary uses.
  - (11) To the extent possible, the Air Pollution Control Officer shall develop screening risk assessment procedures for common equipment and toxic air contaminants to expedite and standardize review for compliance with Section (d). The procedures shall be maintained in writing and available upon request. The Air Pollution Control Officer shall propose additional exemptions to Section (b) that the Air Pollution Control Officer deems appropriate, based on the results of these screening procedures.

Table I

# <u>Toxic Air Contaminants for Which Potential Carcinogenic Impacts</u> <u>Must Be Calculated</u><sup>a</sup>

Substance	Substance
Acetaldehyde	1,2-Dibromo-3chloropropane (DBCP)
Acetimide	p-Dichlorobenzene
Acrylamide	3,3-Dichlorobenzidine
Acrylonitrile	1,1-Dichloroethane (Ethylidene dichloride)
Allyl chloride	Di (2-Ethylhexyl) Phthalate (DEHP)
2-Aminoanthraquinone	Diesel Exhaust Particulate
Aniline	p-Dimethylaminoazobenzene
Arsenic and compounds (inorganic)	2,4-Dinitrotoluene
Asbestos	1,4-Dioxane (1,4-Diethylene dioxide)
Benzene	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
Benzidine (and its salts)	Ethylene dibromide (1, 2 - Dibromoethane)
Benzidine based dyes	Ethylene dibromide (1, 2 - Dibromoethane)
Direct Black 38	Ethylene oxide (1,2-Epoxyethane)
Direct Blue 6	Ethylene thiourea
Direct Brown 95 (technical grade)	Formaldehyde
Benzyl chloride	Hexachlorobenzene
Beryllium and compounds	Hexachlorocyclohexanes (mixed or technical grade
Bis (2-chloroethyl) ether (Dichloroethyl ether)	alpha-Hexachlorocyclohexane
Bis (chloromethyl) ether	beta-Hexachlorocyclohexane
Potassium Bromate	gamma-Hexachlorocyclohexane (Lindane)
1,3-Butadiene	Hydrazine
Cadmium and compounds	Lead and compounds (inorganic)
Carbon tetrachloride (Tetrachloromethane)	Lead acetate
Chlorinated Paraffins	Lead phosphate
4-Chloro-o-phenylenediamine	Lead subacetate
Chloroform	Methyl tertiary-butyl ether
Chlorophenols	4,4'-Methylene Bis (2-chloroaniline) (MOCA)
Pentachlorophenol	Methylene chloride (Dichloromethane)
2, 4, 6 - Trichlorophenol	4,4'-Methylene dianiline (and its dichloride)
p-Chloro-o-toluidine	Michler's Ketone (4,4'-Bis (dimethylamino)
Chromium (hexavalent)	benzophenone)
Barium chromate	N-nitroso-n-dibutylamine
Calcium chromate	N-Nitrosodi-n-propylamine
Chromium trioxide	N-Nitrosodiethylamine
Lead chromate	N-Nitrosodimethylamine
Sodium dichromate	N-Nitrosodiphenylamine
Strontium chromate	N-Nitrosomorpholine
p-Cresidine	N-Nitrosopiperidine
Cupferron	N-Nitrosopyrrolidine
2,4-Diaminoanisole	
2,4-Diaminotoluene	

#### Table I - continued

### Toxic Air Contaminants for Which Potential Carcinogenic Impacts Must Be Calculated<sup>a</sup>

Substance	Substance
Nickel and nickel compounds	PAH - continued
Nickel acetate	Benzo[b]fluoranthene
Nickel carbonate	Benzo[j]fluoranthene
Nickel carbonyl	Benzo[k]fluoranthene
Nickel hydroxide	Chrysene
Nickelocene	Dibenz(a,h,)acridine
Nickel oxide	Dibenz[a,h]anthracene
Nickel subsulfide	Dibenz(a,j)acridine
p-Nitrosodiphenylamine	Dibenzo(a,e)pyrene
Particulate emissions from diesel-engines	Dibenzo(a,h)pyrene
Perchloroethylene (Tetrachloroethylene)	Dibenzo(a,i)pyrene
PCBs (Polychlorinated biphenyls) [low risk]	Dibenzo(a,l)pyrene
PCBs (Polychlorinated biphenyls) [high risk]	7h-dibenzo(c,g)carbazole
Polychlorinated dibenzo-p-dioxins (PCDD)	7,12-dimethylbenz(a)anthracene
(as 2,3,7,8-PCDD Equivalent)	1,6-dinitropyrene
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1,8-dinitropyrene
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	Indeno[1,2,3-cd]pyrene
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	3-Methylcholanthrene
1,2,3,4,6,7,8,9-Hexachlorodibenzo-p-dioxin	5-Methylchrysene
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	5-Nitroacenaphthene
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	6-Nitrochrysene
Polychlorinated dibenzofurans (PCDF)	2-Nitrofluorene
(as 2,3,7,8-PCDD equivalent)	1-Nitropyrene
2,3,7,8-Tetrachlorodibenzofuran	4-Nitropyrene
1,2,3,7,8-Pentachlorodibenzofuran	1,3-Propane sultone
2,3,4,7,8-Pentachlorodibenzofuran	Propylene oxide
1,2,3,4,7,8-Hexachlorodibenzofuran	1,1,2,2-Tetrachloroethane
1,2,3,6,7,8- Hexachlorodibenzofuran	Thioacetamide
1,2,3,7,8,9- Hexachlorodibenzofuran	Toluene diisocyantates
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Toluene-2,4-diisocyanate
2,3,4,6,7,8-Hexachlorodibenzofuran	Toluene-2,6-diisocyanate
1,2,3,4,7,8,9-Octachlorodibenzofuran	1,1,2-Trichloroethane (vinyl trichloride)
Polycyclic Aromatic Hydrocarbon (PAH)	Trichlorethylene
Benz[a]anthracene	Urethane (ethyl carbamate)
Benzo[a]pyrene	Vinyl chloride (chloroethylene)

a. Unit Risk Values shall be obtained from the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993 or any health risk assessment guidelines adopted by the state Office of Environmental Health Hazard Assessment (OEHHA), pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993. Table I was revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(18) effective on September 15, 2000, and January 11, 2001.

Table II

# Toxic Air Contaminants for Which Potential Chronic Noncancer Impacts Must Be Calculated<sup>a</sup>

Acetaldehyde Acrolein	Codium diahramata
	Sodium dichromate
	Strontium chromate
Acrylamide	Copper and compounds
Acrylic acid	Cresols (mixtures of)
Acrylonitrile	M-Cresol
Allyl chloride	O-Cresol
Ammonia	P-Cresol
Aniline	Cyanide And Compounds (inorganic)
Antimony compounds	Hydrogen cyanide (Hydrocyanic acid)
Antimony Trioxide	1, 2 - Dibromo-3-chloropropane (DBCP)
Arsenic and compounds (inorganic)	p - Dichlorobenzene (1, 4 - Dichlorobenzene)
Arsine	Diesel Particulate
Benzene	1,1 Dichloroethylene
Benzidine (and its salts)	Di (2-ethylhexyl)phthalate (DEHP)
Benzidine based dyes	Dimethylamine
Direct Black 38	N,N-Dimethyl formamide
Direct Blue 6	1, 4- Dioxane
Direct Brown 95 (technical grade)	Epichlorohydrin
Benzyl chloride	1,2-Epoxybutane
Beryllium and compounds	Ethyl acrylate
Bromine compounds	Ethyl benzene
Bromine pentafluoride	Ethyl chloride
Hydrogen bromide	Ethylene Dibromide (1, 2 - Dibromoethane)
Potassium Bromate	Ethylene Dichloride (1, 2 - Dichloroethane)
Cadmium and compounds	Ethylene glycol
Carbon disulfide	Ethylene oxide
Carbon tetrachloride (Tetrachloromethane)	Fluorides and compounds
Chlorine	Hydrogen fluoride
Chlorine dioxide	O-Cresol
2-Chloroacetophenone	Fluorocarbons (chlorinated)
Chlorobenzene	Chlorinated fluorocarbon (CFC-113)
Chloroform	Chlorodifluoromethane (Freon 22)
Chlorophenols	Dichlorofluoromethane (Freon 12)
2-Chlorophenol	Trichlorofluoromethane (Freon 11)
Pentachlorophenol	Fluorocarbons (brominated)
Tetrachlorophenols	Formaldehyde
2,3,4,6-Tetrachlorophenol	Gasoline vapors
	Glutaraldehyde
Chloroprene	Glycol Ethers
Chloroprene Chromium (hexavalent)	Ethylene glycol butyl ether – EGBE
Barium chromate	Ethylene glycol ethyl ether – EGEE
Calcium chromate	Ethylene glycol ethyl ether acetate –EGEEA
Chromium trioxide	Ethylene glycol ethyl ether – EGME  Ethylene glycol methyl ether – EGME
Lead chromate	Ethylene glycol methyl ether acetate - EGM

#### Table II - continued

# <u>Toxic Air Contaminants for Which Potential Chronic Noncancer Impacts</u> <u>Must Be Calculated</u><sup>a</sup>

Substance	Substance
Hexachlorobenzene	Nickel refinery dust from the
Hexachlorocyclohexanes (mixed or technical grade)	pyrometallurgical process
Alpha - Hexachlorocyclohexane	Nickel subsulfide
Beta – Hexachlorocyclohexane	Nitrobenzene
gamma-Hexachlorocyclohexane (Lindane)	Nitrogen dioxide
Hexachlorocyclopentadiene	2 - Nitropropane
n-Hexane	Ozone
Hydrazine	Particulate emissions from diesel-fueled engines
Hydrochloric acid	Perchloroethylene (Tetrachloroethylene)
Hydrogen sulfide	Phenol
Isopropyl alcohol (Isopropanol)	Phosphine
Maleic anhydride	Phosphoric acid
Manganese and compounds	Phosphorous (white)
Mercury and compounds (inorganic)	Phthalic anhydride
Mercuric chloride	PCB (polychlorinated biphenyls) [low risk]
	PCB (polychlorinated biphenyls) [high risk]
Mercury and compounds (organic)	Polychlorinated dibenzo-p-dioxins (PCDD)
Methyl mercury	(as 2,3,7,8-equivalent)
Methanol	2,3,7,8-Tetrachlorodibenzo-p-dioxin
Methyl bromide (Bromomethane)	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
Methyl tert-butyl ether	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
Methyl chloroform (1, 1, 1 - TCA)	
Methyl ethyl ketone (2-Butanone)	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
Methyl isocyanate	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
Methyl methacrylate	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
Methylene chloride (Dichloromethane)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
4,4'-methylene dianiline (and its dichloride)	Polychlorinated dibenzofurans (PCDF)
Methylene diphenyl isocyanate (Polymeric)	(as 2,3,7,8-equivalent)
Methylene diphenyl diisocyanate	2,3,7,8-Tetrachlorodibenzofuran
Mineral fibers (< 1% free silica)	1,2,3,7,8-Pentachlorodibenzofuran
Ceramic fibers (man-made)	2,3,4,7,8-Pentachlorodibenzofuran
Glasswool (man-made fibers)	1,2,3,4,7,8-Hexachlorodibenzofuran
Mineral fibers (fine: man-made)	1,2,3,6,7,8-Hexachlorodibenzofuran
Rockwool (man-made fibers)	1,2,3,7,8,9-Hexachlorodibenzofuran
Slagwool (man-made fibers)	2,3,4,6,7,8-Hexachlorodibenzofuran
Naphthalene	1,2,3,4,6,7,8-Heptachlorodibenzofuran
Nickel and nickel compounds	1,2,3,4,7,8,9-Heptachlorodibenzofuran
Nickel acetate	1,2,3,4,6,7,8,9-Octachlorodibenzofuran
Nickel carbonate	Polycyclic Aromatic Hydrocarbon (PAH)
Nickel carbonyl	Napthalene
Nickel hydroxide	Propylene (propene)
Nickelocene	Propylene glycol monomethyl ether
Nickel oxide	Propylene oxide

Table II - continued

## Toxic Air Contaminants for Which Potential Chronic Noncancer Impacts Must Be Calculated<sup>a</sup>

Substance	Substance
Selenium compounds Selenium sulfide Sodium hydroxide Styrene Sulfates Sulfur dioxide Toluene Toluene diisocyantates Toluene-2,4-diisocyanate Toluene-2,6-diisocyanate Trichloroethylene Triethylamine	Vinyl acetate Vinyl bromide Vinyl chloride Vinylidene chloride Xylenes (mixed isomers)  m-Xylene o-Xylene p-Xylene Zinc compounds Zinc oxide

a. Reference Exposure Levels and toxic endpoint information shall be obtained from the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993 or any health risk assessment guidelines adopted by the state Office of Environmental Health Hazard Assessment (OEHHA), pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993. Table II was revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(18) effective on September 15, 2000, January 11, 2001, and March 12, 2001.

Table III

## <u>Toxic Air Contaminants for Which Potential Acute Noncancer Impacts</u> <u>Must Be Calculated</u><sup>a</sup>

Chemical	Chemical
Acrolein	Nickel and compounds
Acrylic acid	Nickel acetate
Ammonia	Nickel carbonate
Arsenic and compounds (inorganic)	Nickel carbonyl
Arsine	Nickel hydroxide
Benzene	Nickelocene
Benyzl chloride	.Nickel oxide
Carbon disulfide	Nickel refinery dust from the pyrometallurgical
Carbon monoxide	process
Carbon tetrachloride	Nickel subsulfide
Chlorine	Nitric acid
Chloroform	Nitrogen dioxide
Chloropicrin	Ozone
Copper and compounds	Perchloroethylene (Tetrachloroethylene)
Cyanide And Compounds (inorganic)	Phenol
Hydrogen cyanide	Phosgene
1, 4 - Dioxane	Propylene oxide
Epichlorohydrin (1-Chloro-2,3 – poxypropane)	Selenium and compounds Hydrogen selenide
Fluorides and compounds	Sodium hydroxide
Hydrogen fluoride (Hydrofluoric acid)	Styrene
Formaldehyde	Sulfates
Glycol Ethers	Sulfur dioxide
Ethylene glycol butyl ether – EGBE	Sulfuric acid and oleum
Ethylene glycol ethyl ether - EGEE	Sulfuric acid and oleum
Ethylene glycol ethyl ether acetate – EGEEA	Sulfur trioxide
Ethylene glycol methyl ether - EGME	Oleum
Hydrochloric acid	
Hydrogen sulfide	Toluene
Isopropyl alcohol (Isopropanol)	Triethylamine
Mercury and compounds (inorganic)	Vanadium (fume or dust)
Mercuric chloride	Vanadium pentoxide
Methanol	Vinyl chloride (Chloroethylene)
Methyl bromide (Bromomethane)	Xylenes (mixed isomers)
Methyl chloroform	m-Xylene
Methyl ethyl ketone (2-Butanone)	o-Xylene
Methylene chloride (Dichloromethane)	p-Xylene

a. Reference Exposure Levels and toxic endpoint information shall be obtained from the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993 or any health risk assessment guidelines adopted by the state Office of Environmental Health Hazard Assessment (OEHHA), pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993. Table III was revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(18) effective on January 11, 2001.