

**Air Pollution Control Board**

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**Air Pollution Control Officer**

R. J. Sommerville

March 18, 1996

TO: Rule 1200 (Toxic Air Contaminants - New Source Review)  
Workshop Participants and Other Interested Parties

FROM: Richard J. Smith  
Deputy Director

**NEW RULE 1200 - TOXICS AIR CONTAMINANTS -  
NEW SOURCE REVIEW  
FINAL RULE AND WORKSHOP REPORT**

On November 21, 1995, you attended a Workshop to discuss proposed new Rule 1200. Attached for your review are the workshop report and the final Rule 1200 that will be considered for adoption by the Air Pollution Control Board. Because of substantial revisions to Section (e) and Tables I, II, and III, the original Workshop version is also attached. The rule will likely be scheduled for public hearing in May, 1996.

If you have any questions, please call me at (619) 694-3303.

RICHARD J. SMITH  
Deputy Director

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Attachments

**AIR POLLUTION CONTROL DISTRICT  
SAN DIEGO COUNTY**

**NEW RULE 1200  
NEW SOURCE REVIEW - TOXIC AIR CONTAMINANTS.**

**WORKSHOP REPORT**

A workshop notice was mailed to all companies in San Diego County that have District permits. Notices were also mailed to all Chambers of Commerce in San Diego County, all Economic Development Corporations and other interested parties.

The workshop was held on June 22, 1995, and was attended by 35 persons. The workshop comments and District responses are as follows:

**1. WORKSHOP COMMENT**

The District should add an exemption for wood product stripping, similar to that in the South Coast Air Quality Management District. This exemption should require T-BACT and have an upper bound for allowable cancer risk of 100 in one million.

**DISTRICT RESPONSE**

An exemption for wood product stripping, operations that will install T-BACT has been added to the proposed rule.

**2. WORKSHOP COMMENT**

Comments from the California Air Resources Board have suggested that equipment that is exempt from the rule in Section (b) have risk caps not to be exceeded of 100 in one million for cancer risk and 10 for Total Hazard Index (THI). Why did ARB select these values as caps when the rule specifies a cancer risk of 10 in one million (100 if specified criteria are met) and a THI of 1 (5 if approved by the state Office of Environmental Health Hazard Assessment)?

**DISTRICT RESPONSE**

The ARB's suggested caps are contained in their Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants. They are simply guidelines for districts to consider when developing rules to regulate new and modified sources of toxic air contaminants. The ARB comment is intended to suggest that the District include an upper bound of allowable risk for exempt equipment.

When proposed Rule 1200 was developed, the addition of an upper bound to the exemptions was considered. It was decided not to do so because there was concern this would imply a risk assessment was required to ensure this upper bound was not exceeded. This was not the District's intent. Since the District was unaware of any exempted equipment that could have a risk that would approach a limit of 100 in one million, it was decided not to include such an upper limit in the exemption. However, in response to the ARB suggestion, an upper limit for cancer risk of 100 in one million has been added for exempt equipment. The District will make use of look-up tables and other streamlining methods to ensure this upper risk limit is not exceeded without the need to perform a risk assessment.

**3. WORKSHOP COMMENT**

The rule is applicable to projects for which a Notice of Intention or Application for Certification has been accepted by the California Energy Commission. What size projects are required to seek such approvals from the CEC?

**DISTRICT RESPONSE**

Typically, these are projects that produce 50 or more megawatts of electricity.

**4. WORKSHOP COMMENT**

If this rule is adopted, at what point in time will applications be subject to it?

**DISTRICT RESPONSE**

The District is currently applying the criteria contained in the proposed rule to new and modified sources of toxic air contaminants. Therefore, as a practical matter, the date on which applications will be subject to the rule does not matter. However, the District will specify that the rule will become effective 30 days after adoption.

**5. WORKSHOP COMMENT**

What data will be used to determine what off-site emission units will need to be reduced in order for sources required to provide off-site offsets to be permitted? Will modeling be required

**DISTRICT RESPONSE**

The District intends on using data from the AB 2588 program unless the Air Pollution Control Officer approves the use of other emissions and risk impact data as being more representative. This criteria is specified in Subsection (d)(1)(ii)(E).

**6. WORKSHOP COMMENT**

What happens if an offsite-emission unit shows up on the AB 2588 data as having a risk impact greater than 10 in one million where the impact from the project is greater than 10 in one million but in fact, this off-site emission unit has already reduced its emissions below 10 in one million subsequent to its submittal of the AB 2588 data?

**DISTRICT RESPONSE**

In this case, the project would not be required to obtain emission reductions from this off-site emission unit. The language in Subsection (d)(1)(ii)(E) allowing the Air Pollution Control Officer to approve the use of other emissions and risk impact data as being more representative would allow the use of updated emissions and risk data.

**7. WORKSHOP COMMENT**

The District should revise the rule to allow only cancer risks of 10 in one million or less. There should be no provisions to approve projects with risks greater than 10 in one million.

**DISTRICT RESPONSE**

The risk management criteria contained in the rule is specific to an individual emission unit. They were developed as part of a cooperative working group effort between the District, local businesses, the military and environmental groups. It was the consensus of this working group that projects with cancer risks greater than 10 in one million should be allowed if they met the very stringent criteria specified in Subsection (d)(1)(ii). The District agrees and will retain the provisions allowing projects with cancer risks greater than 10 in one million, not to exceed 100 in one million.

**8. WORKSHOP COMMENT**

There are discontinuities that occur with the computer modeling of fugitive sources of emissions. The problem is greatest when modeling for acute exposures (e.g. 1 hour exposures). The District should ensure that its modeling of area fugitive emissions provides results that are as accurate as possible. If such accuracy cannot be assured, the District should consider not requiring modeling of these area fugitive emission sources.

**DISTRICT RESPONSE**

The District strongly believes there should be risk management criteria specified in the rule for acute exposures to toxic air contaminants. However, the District will ask its air quality modeling staff to address this issue. If available modeling overpredicts short term concentrations when modeling fugitive emissions, this will be addressed in the District's air quality modeling procedures. People who have information regarding the ability to accurately model fugitive emissions, particularly for acute exposures, are invited to contact the District's Air Toxics Section.

**9. WORKSHOP COMMENT**

The major standards of Section (d) - Standards should be bolded so they are easier to use.

**DISTRICT RESPONSE**

The District agrees and has bolded and underlined the major risk management standards contained in Section (d).

**10. WORKSHOP COMMENT**

Greater specificity and clarity should be provided in Section (e) concerning emission and risk calculation procedures.

### **DISTRICT RESPONSE**

Section (e) has been revised to add additional language regarding emission calculation procedures, particularly with respect to calculating emission increases, potential to emit, actual emissions and emission reductions.

### **11. WORKSHOP COMMENT**

Section (e)(6) should be revised to specify that a member of the public can request that the Air Pollution Control Officer make changes to a risk assessment incorporating new or revised health risk values that have been approved by the state Office of Environmental Health Hazard Assessment.

### **DISTRICT RESPONSE**

Section (e)(6) was intended to require a project applicant to make necessary changes to the health risk assessment to incorporate new or revised health risk values issued by the state Office of Environmental Health Hazard Assessment and submit the revised risk assessment to the District. Concern was expressed over the time and cost of doing so and it was suggested that if such a situation occurred, the project applicant should have the option of requesting the District to make the necessary changes in lieu of the applicant. It was not intended to allow only a project applicant to request that updated health risk values be used. Section (e)(6) [now (e)(1)] has been clarified. If a person is aware of revised health risk data they do not believe the District is aware of, that person can bring this information to the District's attention.

### **12. WORKSHOP COMMENT**

Table II does not include target organs. Does the District plan on applying risk management criteria to target organs for chronic exposure as well as acute exposure?

### **DISTRICT RESPONSE**

Yes. Noncancer health risks will be calculated for chronic and acute exposure on a target organ basis. The definitions for "Total Acute Noncancer Health Hazard Index" and "Total Chronic Noncancer Health Hazard Index" specify that this will be done. The risk calculation procedures referenced in Section (e) also specify that the Total Hazard Index shall be calculated on a target organ basis. To eliminate confusion, the listing of target organs (toxicological end points) have been deleted from Table II.

### **13. WORKSHOP COMMENT**

What will the District do if it is aware of a chemical for which health effects data exists but such data has not yet been approved by OEHHHA, or a chemical which is not on Table I, II or III but for which health effects data exists?

### **DISTRICT RESPONSE**

This is addressed in the definition of "Toxic Air Contaminant" which specifies that 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 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 also petition the Air Pollution Control Officer to add pollutants to these tables.

#### **14. WORKSHOP COMMENT**

The District should give careful consideration to the Air Resources Board's suggestion to incorporate a general reference the federal Clean Air Act rather than to the MACT requirements of Section 112. Referencing Sections 111 and 112 would adequately address ARB's concern.

#### **DISTRICT RESPONSE**

As suggested, the District has revised the reference to Maximum Achievable Control Technology requirements in the federal Clean Air Act to specify "...Maximum Achievable Control Technology requirements adopted pursuant to either Section 111 or 112 of the federal Clean Air Act or to comply with ...". The referenced ARB comment is presented in Comment #40.

#### **15. WORKSHOP COMMENT**

Does the rule allow a grandfathered emission unit to net emissions and net risk increases and decreases?

#### **DISTRICT RESPONSE**

Yes. The rule allows the netting of risk increases and decreases.

#### **16. WORKSHOP COMMENT**

When does the rule require off-site offsets to be obtained?

#### **DISTRICT RESPONSE**

Off-site offsets are required only if an emission unit has an off-site increase in cancer risk of greater than 50 in one million. Off-site offsets are then required in accordance with the requirements of Subsection (d)(1)(ii)(E).

#### **17. WRITTEN COMMENT**

Facilities with cancer risk levels over 10 per million should not be permitted to locate in San Diego County. Some areas are already significantly impacted by air toxics (360 - 510 cancers per million) and the problem should not be allowed to grow worse. The District has not proposed to study cumulative risks from industrial and vehicular sources of air toxics. The rule should not allow new sources of significant amounts of air toxics to be added to the already

significant problem. Section (d) should be amended to include a cap of 10 cancers per million and the remainder of Section (d)(1)(ii) should be stricken.

### **DISTRICT RESPONSE**

As noted in the response to comment #7, the risk management criteria contained in the rule is specific to an individual emission unit. These criteria were developed as part of a cooperative working group effort between the District, local businesses, the military and environmental groups. It was the consensus of this working group that projects with cancer risks greater than 10 in one million should be allowed if they met the very stringent criteria specified in Subsection (d)(1)(ii). The District agrees and will retain the provisions allowing projects with cancer risks greater than 10 in one million, not to exceed 100 in one million. Given the stringency of the requirements of Subsection (d)(1)(ii) and the difficulty and cost of meeting these requirements, the District believes few, if any, projects will be permitted under the provisions of this Subsection.

### **18. WRITTEN COMMENT**

The significant risk level for purposes of AB 2588 and SB 1731 and the thresholds under which new and modified sources will be permitted under New Source Review (Rule 1200) do not have to be identical. Final consideration of the allowable New Source Review rule thresholds should be postponed until after a decision regarding the significant risk levels for purposes of the AB 2588/SB 1731 program are finalized.

### **DISTRICT RESPONSE**

The District agrees that the significant risk level for purposes of AB 2588 and SB 1731 and the thresholds under which new and modified sources will be permitted under New Source Review (Rule 1200) do not have to be identical. The risk management criteria contained in proposed Rule 1200 is specific to an individual emission unit. The risk management criteria proposed for the AB 2588/SB 1731 program is on a facility-wide basis. The risk management criteria in Rule 1200 cannot be compared to that for the AB 2588/SB 1731 program unless an assumption is made concerning the average number of emission units at an existing facility subject to the AB 2588/SB 1731 program.

### **19. WRITTEN COMMENT**

The definition of "Toxic Air Contaminant" specifies that the Air Pollution Control Officer (APCO) may revise the toxic substances listed in Tables I, II, or III with the concurrence of the Office of Environmental Health Hazard Assessment and after 30 days public notice. A further stipulation should be added that a member of the public may petition the APCO to add pollutants to these tables. This will give the public the ability to call attention to and request development of health based standards for toxic substances of local concern.

### **DISTRICT RESPONSE**

Language has been added to the definition of "Toxic Air Contaminant" to specify that a member of the public may petition the APCO to add pollutants to these tables.

## **20. WRITTEN COMMENT**

As written, the proposed provisions apply to all equipment not specifically exempted by Rule 11 or proposed Rule 1200. Through its current Rule 51 procedures, the District exempts a much larger number of sources, if not by written policy then by practice.

Exempted equipment should include such things as: internal combustion engines, degreasers, parts cleaners, emergency stand-by equipment, low capacity use factor equipment, portable equipment, etc. These may need to be limited due to size, capacity factor and toxicity considerations.

### **DISTRICT RESPONSE**

Section (b) lists all new and modified equipment currently exempted by the District from air toxics review requirements. As noted in Subsection (e)(8) [now (e)(11)], the District will develop screening risk assessment procedures for common equipment and toxic air contaminants to expedite and standardize review for compliance with Rule 1200. The District will propose additional exemptions to Section (b) that are deemed appropriate.

## **21. WRITTEN COMMENT**

The provisions of Subsection (b)(2) do not exempt the identified equipment from the provisions of Subsection (d)(2) - Total Acute Noncancer Health Risk. Although it is agreed that acute noncancer health risks should be controlled, this provision brings to light a regulatory trap created by the BARCT, RACT and Rule 1200 provisions.

As part of the rule adoption process undertaken to implement BARCT and RACT requirements, the District has required sources to achieve specific emission limitations or control efficiencies. In many cases, the limitations and control levels which the BARCT and RACT rule require can be achieved with only one technology or are best achieved by one technology. If the one technological option inevitably results in toxic emissions, what would occur if the risk levels associated with the use of the technology exceed an HHI level of 1? The source would be denied the application for control equipment because it cannot meet the requirements of Rule 1200, but it would also be in violation or potential violation of the BARCT and RACT provisions requiring (essentially) that the equipment be installed. This should be addressed.

### **DISTRICT RESPONSE**

The District strongly believes the public health needs to be protected from acute exposures to toxic air contaminants. Therefore, the requirement to evaluate emission units modified exclusively to comply with a District requirement will be retained. District rules reflecting federal RACT considered potential adverse health impacts resulting from emission control equipment. The District has been advised that potential adverse health impacts resulting from emission control equipment were also considered when the BARCT guidelines were developed. These considerations are reflected in District rules adopted to meet BARCT requirements and were reconsidered during the District's rule adoption process. Future rules adopted to meet state BARCT requirements will also consider potential adverse health impacts, including acute impacts, before adoption. The District does not believe this will be an issue.

## **22. WRITTEN COMMENT**



Subsection (c)(12) - Pre-Project Potential to Emit. The definition includes language addressing those situations in which an existing emission unit does not have specific limiting conditions on a permit. In such cases, the definition states that "actual emissions" are to be used. However, "actual emissions" are not defined. It appears the District's intent is to mirror the language contained in the District's Rule 20.1 - New Source Review rule Subsection (d)(1)(i)(B). That subsection states that for emission units with no specific limiting conditions, the pre-project potential to emit is to be based on the highest actual emission occurring during the one-year period within the five year period preceding the receipt date of the application.

A definition for "actual emissions" should be added which utilizes the cited language of Rule 20.1. This will ensure consistency in the calculation methodology between both rules and reduce confusion about what is referred to as "actual emissions".

#### **DISTRICT RESPONSE**

Section (e) has been revised to add a procedure for calculating "actual emissions".

#### **23. WRITTEN COMMENT**

Subsection (c)(17) - Stationary Source. This definition is somewhat different than that contained in the District's NSR rule. Such differences may result in increased processing times for applications. Of concern is the included wording pertaining to "contiguous", which differs from the criteria NSR definition in some potentially significant ways.

#### **DISTRICT RESPONSE**

The definition of "Stationary Source" has been revised to be consistent with the District's New Source Review rules.

#### **24. WRITTEN COMMENT**

Subsection (c)(18) - Surplus. The definition contains language requiring that reductions be in excess of those which the APCO "reasonably expects will be required" by the Clean Air Act. How does the District intend to make such a determination? Will the only factor in making such a determination be those stated in the third paragraph of the definition? If the District's assumptions about future section 112 requirement are incorrect, does the District intend to adjust toxic emission reductions accordingly, up or down?

The definition also contains language stating that concurrent reductions must occur after the date of adoption of the rule. It is unclear why such a limitation is necessary. Certainly the ability to use previous reductions should be limited but, in a manner analogous to the NSR and emission offset rule provisions, previous reductions should not be discarded altogether. The definition of "Concurrent Emission Reductions" allows a six month window for such reductions. The definition of surplus should allow for the inclusion of concurrent reductions made six months prior to adoption of the rule. The extension of this time period is particularly important given that there are not provisions for the banking or trading toxic air containment emission reductions.

#### **DISTRICT RESPONSE**

The definition of "Surplus" has been revised to specify that emission reductions occurring up to 6 months before the date of adoption of Rule 1200 are surplus.

## **25. WRITTEN COMMENT**

Subsection(c)(22) - Toxic Air Contaminant Potential to Emit. The proposed rule does not contain procedures for calculating potential to emit. Such calculation procedures are necessary to ensure consistency from one application to another, from one processing engineer to another and to provide predictability to the application process. The definition and calculation procedures should be generally (but not verbatim) based on the District's NSR definition. Particular care should be taken to make the NSR and Toxics NSR calculation procedures as consistent as possible. It is important not to make the definitions so different that it would increase application processing time.

Additionally, this definition states "... as a condition to receiving an Authority to Construct and/or Permit to Operate, ..." This should be changed to state: "If the project applicant agrees to include enforceable hourly... ~~as a condition to receiving an~~ to be contained in an Authority to Construct and/or Permit to Operate". This more accurately reflects the District's intent and is consistent with the language in Subsection (e)(1).

### **DISTRICT RESPONSE**

Section (e) has been revised to add a procedure for calculating "Potential to Emit".

## **26. WRITTEN COMMENT**

Subsection (d) - Standards. For new equipment, the increased risk results from a new unit's potential to emit. For existing equipment, the increased risk results from the increase in the emission unit's potential to emit. It is unclear that such a distinction has been made in the regulation or that the language is explicit enough to make the distinction. For example, the determination of increased risk for relocated equipment is calculated differently than for new and modified equipment. The District's criteria NSR rule recognizes these differences.

Inclusion in Subsection (e) of a provision defining how increases in maximum incremental cancer risk, increases in total acute noncancer health hazard index and increases in total chronic noncancer health hazards index are determined would provide the needed clarification. Subsection (e)(1) does not appear to fully address this issue.

### **DISTRICT RESPONSE**

Section (e) has been revised to add the suggested calculation procedures.

## **27. WRITTEN COMMENT**

The wording in Subsection (d)(1)(ii)(B)(10)(i) through (vi) is somewhat confusing. The language used throughout these provision: "Identification of feasible risk reduction measures and measures in excess of T-BACT" seems redundant. It would appear that the definition of "feasible risk reduction measures" includes measures in excess of T-BACT and therefore "measures in excess of T-BACT" is unnecessary. There also appears to be a typographical error

in the language since the term contained in the definitions section of the rule is "feasible cancer risk reduction measure."

The term "feasible risk reduction measure" should be changed to state "feasible cancer risk reduction measure" and deleting the wording "and measures in excess of T-BACT" from all of the like language. The District should consider adding the term "measures in excess T-BACT" to the definition of "feasible cancer risk reduction measure" if it believes that such clarification is appropriate.

### **DISTRICT RESPONSE**

As suggested, the definition of "feasible cancer risk reduction measure" has been revised to specify that it includes control measures in excess of T-BACT. Section (d)(1)(ii)(B)(10)(ii) through (vi) has been revised to delete language specifying that feasible cancer risk reduction measures must be in excess of T-BACT. The noted typographical error has been corrected.

### **28. WRITTEN COMMENT**

Subsection (d)(1)(ii)(B)(10)(vi). The wording in Subsection (d)(1)(ii)(B)(10)(vi) is somewhat confusing. This portion of the regulation (first sentence) requires all feasible risk reduction measures be implemented. The language does not seem to limit which of these feasible risk reduction measures are to be implemented nor does it limit what equipment the measures are to be installed on, be it project, all on stationary source units or off stationary source units. The provisions of Subsection (d)(1)(ii)(C) et seq. contain specific language as to which units must be equipped with controls and specifies to what extent controls must be installed. The language of Subsection (d)(1)(ii)(B)(10)(vi) does not appear to have any such limitations and indeed could be interpreted to supersede the provisions of Subsection (d)(1)(ii)(C) et seq.

It also appears unclear what is meant by "identify all potential reductions in the future" (second sentence). This term is vague and undefined by the proposed rule. It is presumed the intended meaning is to identify potentially feasible risk reduction measures, those measures which are not currently technologically feasible, but which may be so at a later point in time. This would be consistent with ARB guidelines.

There is concern about what would be done with the information contained in the plan. Is it the District's intent to incorporate the plan as a condition for granting the permit as is fairly clear from the language of the first sentence will be the case? If so, how would the identified measures be required to be implemented? The proposed rule does not contain provisions for the incorporation of this information into a permit nor does it appear to limit the District's authority to require a source to implement those measures, nor for consideration of cost or technological feasibility.

If it is not the District's intent to incorporate this plan as part of the permit provisions, this provision should be deleted. It appears that the provisions of Subsection (d)(1)(ii)(D) & (E) take care of the issue of identifying and implementing feasible cancer risk reduction measures at a source, making the provisions of Subsection (d)(1)(ii)(B)(10)(vi) unnecessary. If the language is kept, there will be projects where public pressure will be brought to bear on the District to require the potentially feasible cancer risk reduction measures identified in the plan. These latter measures are very speculative and, given Subsection (d)(1)(ii)(D) & (E), seemingly unnecessary.

If the plan is to be incorporated into a permit, the provisions also do not allow for modification of the plan nor do they address what would happen should one of the measures identified in the plan prove not to be technologically feasible nor is the timing for implementation of these measures identified nor is there a selection criteria for which ones need to be implemented at permit issuance or if later changes are necessary. Further, it is unclear how future regulatory action requiring some of the measures identified in the plan will affect original permit issuance. For example, if the plan identifies a given control technique which has not yet been implemented and a toxic control measure promulgated after project and plan approval requires those reductions, would this affect the original project issuance and resultant permit conditions, since the reductions would no longer be "surplus"?

### **DISTRICT RESPONSE**

[paragraph 1] Subsection (d)(1)(ii)(B)(10)(vi) has been revised to specify that, to the maximum extent possible, the plan must identify future potentially feasible cancer risk reduction measures necessary to reduce the increase in maximum incremental cancer risk to 10 in one million or less. Subsection (d)(1)(ii)(B)(10) specifies that the cancer risk reduction plan is required only for the project that increases cancer risk. Emission units modified to provide concurrent emission reductions do not need to be included.

[paragraph 2] Subsection (d)(1)(ii)(B)(10)(vi) has been revised to clarify the intent and make it more consistent with the ARB Guidelines. In addition, Feasible Cancer Risk Reduction Measures have been redefined as Future Potentially Feasible Cancer Risk Reduction Measures and are 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.

[Paragraph 3] Subsection (d)(1)(ii)(C) has been revised to require the District to include in any Authority to Construct that is issued for a project subject to this Subsection 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)(ii)(B)(10)(vii).

[Paragraph 4] Subsection (d)(1)(ii)(B)(10) requires a project applicant to evaluate cancer risk reduction measures that are expected to be potentially feasible in the future and commit to implementing those measures within a specified time frame. A requirement to implement such measures will be contained as a permit condition in any Authority to Construct that is issued. The intent is to reduce the impact of the project to 10 in one million or less, or as close as possible to this risk level.

[Paragraph 5] If any of the measures identified in the plan prove not to be technologically feasible or the timing for implementation is not feasible, the project applicant may apply to the District to modify an Authority to Construct or Permit to Operate condition requiring such implementation. The District will evaluate such application and modify the Authority to Construct or Permit to Operate if it agrees such modification is warranted by the information presented by the applicant.

## 29. WRITTEN COMMENT

Subsection (b)(1)(ii)(B)(10)(vi). The following wording changes should be made:

"Identification of feasible cancer risk reduction measures ~~and measures in excess of T-BACT~~ that will be implemented in conjunction with the project to reduce potential risk from the project, and a detailed schedule for implementation. If the plan shows that these measures are insufficient to reduce the increase in maximum incremental cancer risk to 10 in one million or less, the plan shall identify all potentially ~~reductions in the future~~ feasible risk reduction measures."

A new definition should be added for "potentially feasible risk reduction measures" which generally states that they are feasible risk reduction measures which are not technologically feasible today, but which may be at some point in the future.

Additionally, the issues discussed above regarding enforceability, selection criteria, timing, criteria for limiting what potential reductions are to be required, modifications to the plan, etc. should be addressed. Wording should be added which will allow the source and the District to modify the approved risk reduction plan as necessary if measures prove not to be technologically feasible or if other measures come forth which could be substituted for some of the measures originally identified in the plan. The issue of potentially feasible risk reduction measures which indeed prove to not be technologically feasible should be addressed, as well as technology selection criteria, cost and timing.

## DISTRICT RESPONSE

Section (d)(1)(B)(10) has been revised to clarify the intent and applicability. Feasible Cancer Risk Reduction Measures have been redefined as Future Potentially Feasible Cancer Risk Reduction Measures and are control measures and techniques that are in excess of T-BACT and are expected to be technologically feasible and economically practicable in the future.

If any of the measures identified in the plan prove to not be technologically feasible, or the timing for implementation of such measures proves to not be feasible, or other measures evolve which could be substituted for measures originally in the plan, the project applicant may apply to the District to modify an Authority to Construct or Permit to Operate condition requiring the implementation of such measure. The District will evaluate any such application and modify the Authority to Construct or Permit to Operate as appropriate on a case-by-case basis.

## 30. WRITTEN COMMENT

Subsection (d)(1)(ii)(E) is confusing. It appears to require that, if a project's increased risk is greater than 50 in one million, all "available risk reductions" be provided from "permitted" emission units which, based on AB2588 records, have an existing risk of over 10 in one million in the same area where the proposed project will have a risk of over 10 in one million or all "available risk reductions" be provided until the resulting increase in risk from the proposed project at all receptor locations within the proposed "project impact area" is equal to or less than 10 in one million.

- a. The term "all available risk reductions" is not defined and it is unclear what this encompasses. We note that this term is different than that used in Subsection

(d)(1)(ii)(B)(10)(vi) ("all potential reductions in the future") discussed above. The language could be clarified by changing it as follows: "all available cancer risk reductions".

- b. It is unclear what is meant by "permitted" emission units. If this is intended to mean off-stationary source permitted emission units, the rule should specifically state so. As written, the provision is not specific enough to easily decipher that the intent is to require "available risk reductions" from off-stationary source permitted emission units within the proposed project's 10 in one million area of impact.
- c. The term "project impact area" is unclear and is not defined. This term is the same as that used in the PSD provisions of the District's criteria NSR rules. The terms have different meanings. The term should be defined.
- d. The requirement to reduce a proposed project's maximum risk to less than 10 in one million at all receptor locations is confusing. If the District's intent is to have the source reduce the incremental increase in the cancer risk in the project's immediate area as a way of addressing potential "hot spot" issues, the following changes are recommended:

"... or are provided until the resulting expected incremental increase in maximum incremental cancer risk, including background risk as determined utilizing AB2588 data, from the project at all receptor locations within the project impact area is equal to or less than 10 in one million after the project."

- e. The language limiting how much emission reductions must be provided based on cost and availability of emission reductions does not appear to give relief from the language requiring risk reductions. This is as a result of three things. First, emission reductions do not necessarily result in a commensurate reduction in risk. If the emissions being reduced are not particularly toxic, but they are very expensive to obtain, will the District allow the cost limitation criteria to be utilized? Secondly, the crafted language does not specifically state that, if a project proponent can demonstrate that the cost of obtaining the reductions exceed the specified cost criteria or if emission reductions are not available, then showing the reductions in risk required by the first sentence are no longer necessary or reduced to another level. This tie-in should be explicitly stated. Thirdly, it is unclear if the cost criteria is intended to consider only single source of reductions or the overall cost of making the reductions necessary to achieve an overall project impact of less than 10 in one million.

### **DISTRICT RESPONSE**

- a. Subsection (d)(1)(ii)(E) has been clarified as suggested to specify "all available cancer risk reductions".
- b. Subsection (d)(1)(ii)(E) has been clarified to specify that emission reductions must be provided from permitted emission units at stationary sources other than the stationary source where the project is located or will be located (i.e. off-site emission reductions).
- c. The term "project impact area" means an area impacted by the emissions increase from the project. However, this term has been deleted from Subsection (d)(1)(ii)(E).

- d. Subsection (d)(1)(ii)(E) has been revised to clarify the intent, similar to the suggested language.
- e. Subsection (d)(1)(ii)(E) specifies that emission reductions shall not be required if the annualized cost of the associated risk reduction 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. If emission reductions do not result in a commensurate reduction risk, the risk reduction per unit of maximum incremental cancer risk reduced will be greater than 1.25 times the annualized cost per unit of maximum incremental cancer risk reduced by T-BACT for the project and therefore the emission reductions would not be required.

If the cost of obtaining the reductions exceeds the specified cost criteria or if emission reductions are not available, they do not have to be provided. Subsection (d)(1)(ii)(E) has been modified to clarify this.

Subsection (d)(1)(ii)(E) has been clarified to state that the cost effectiveness exemption is applicable if the project applicant demonstrates that the annualized cost of the cancer risk reduction (from a 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. If off-site emission reductions are not available, to reduce the resulting increase in cancer risk from the project to less than 10 in one million they are not required.

### **31. WRITTEN COMMENT**

Subsection (d)(2) and (3). The language allows the use of an alternative total health hazard index. The intent appears to be for the District to consult with OEHHHA to determine if the health effects data used in determining the HHI are appropriate for those projects having an HHI greater than 1. The District would then take OEHHHA's comments into account in determining whether such a project could be approved. This should be clarified.

#### **DISTRICT RESPONSE**

Language has been added to Subsection (d)(2) to clarify that when the state Office of Environmental Health Hazard Assessment determines that an alternate total acute noncancer health hazard index is sufficiently health protective, 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. Language has also been added to Subsection (d)(3) to make this same clarification for the total chronic noncancer health hazard index.

### **32. WRITTEN COMMENT**

Subsection (d)(2) and (d)(3). The language allows the use of an alternative total health hazard index. This could mean one that is higher or lower. This language is of concern because it may make the required demonstration a moving target. Further, differing opinions on what this value is for a given compound often exist. The way the regulatory language is crafted, an alternative HHI could be used even if OEHHHA has not made a final decision or if insufficient data exists. This could lead to the use of speculative and non-science based HHI's.

### **DISTRICT RESPONSE**

The intent of Subsections (d)(2) and (d)(3) is to allow the District to use a Total Hazard Index of greater than 1.0 but less than 5.0 if after checking with the state Office of Environmental Health Hazard Assessment it is determined that the use of such an alternate Total Hazard Index is appropriate. This comment asks whether the District will use a THI of less than 1.0 if OEHHHA's response is that a THI of less than 1.0 is appropriate based on the most recent health affects data. If OEHHHA recommends that a THI of less than 1.0 is appropriate based on the most recent health affects data, the District will use the THI of less than 1.0 recommended by OEHHHA.

### **33. WRITTEN COMMENT**

Subsection (e)(3). Language should be added which specifically states that shutdowns can also be used for concurrent emission reductions.

### **DISTRICT RESPONSE**

The definition of Concurrent Emission Reductions has been modified to specify that emission reductions resulting from the shutdown of an emission unit are eligible to be concurrent emission reductions.

### **34. WRITTEN COMMENT**

Subsection (e)(4). This provision states that OEHHHA procedures are to be used for determining health risk. Most District's including SDCAPCD have utilized CAPCOA guidelines and procedures to date. OEHHHA's procedures have not yet been adopted. The District should not require the use of procedures which have not been finalized or adopted by OEHHHA. The language should be revised to allow the use of CAPCOA methods until such time as the OEHHHA methods are adopted.

### **DISTRICT RESPONSE**

OEHHHA is currently developing revised health risk assessment guidelines. This will be done in 4 phases: (1) evaluation of acute noncancer health effects, (2) evaluation of cancer health effects, (3) evaluation of chronic noncancer health effects, and (4) exposure and uncertainty analysis. OEHHHA adoption of these guidelines is not expected for at least another year. In the interim, District will use the CAPCOA guidelines. The rule has been revised to reflect this.

### **35. WRITTEN COMMENT**

Subsection (e)(5). This language is confusing and should be revised as follows:

(5) "When calculating the increases in total acute and chronic noncancer health hazard indexes and increases in maximum incremental cancer risk from a project when which is providing concurrent emission reductions are provided, emissions shall be calculated as follows:



~~(i) For from the new or modified emission units constituting the which are part of the proposed project, emissions shall be based on the proposed project's increase in toxic air contaminant potential to emit consistent with the provisions of Subsection (e)(1), and~~

~~(ii) For from existing emission units providing from which concurrent emission reductions will be provided, emissions shall be based on the emission unit's actual emissions levels for the exposure period of concern averaged over the most representative two consecutive years within the five years preceding the receipt date of the application for the project, as determined by the Air Pollution Control Officer.~~

Procedures to determine increased risk from such emission units shall be conducted as provided for by Subsection (e)(4)."

The cited provision also utilizes the term "actual emissions." As discussed above, a definition for "actual emissions" should be added to the proposed rule. It should be noted that the meaning of "actual emissions" contained in Subsection (e)(5) is different than that used in the definition of pre-project potential to emit (Subsection (c)(12)). Therefore, it appears that the District intends to have (as the existing NSR rule does) two different definitions for actual emissions; one to be used when determining pre-project potential to emit for emission units which do not have enforceable permit conditions limiting potential to emit and another for determining pre-project potential to emit for projects which do.

#### **DISTRICT RESPONSE**

Section (e) has been revised to address the concerns raised by this comment. Section (e) has also been revised to add a procedure for calculating "actual emissions".

#### **36. WRITTEN COMMENT**

Subsection (e)(8). The District is encouraged to develop screening procedures and add equipment, as appropriate, to the exemptions list as soon as practical.

#### **DISTRICT RESPONSE**

The requested screening procedures are currently under development and are expected to be available for use by the time Rule 1200 is adopted and becomes effective.

#### **37. WRITTEN COMMENT**

Table II. This list of toxic air contaminants for which chronic noncancer impacts should be calculated includes nitrogen dioxide and sulfur dioxide which are criteria air contaminants. Other than toxic compounds which are also volatile organic compounds, the District has not analyzed criteria air contaminants for purposes of toxics health impacts. Inclusion of these compounds goes beyond existing District Rule 51 policy provisions and should be deleted from the list.

#### **DISTRICT RESPONSE**

OEHHA recently decided not to require air district's to include NOx and SOx in health risk assessments. Districts routinely evaluate the potential health impacts of these pollutants as part

of their ozone control programs. Therefore, these criteria air pollutants have been dropped from Table II as requested. These pollutants will not need to be included in health risk assessments.

**38. WRITTEN COMMENT**

As a matter of general concern, the District should ensure that those provisions of proposed Rule 1200 pertaining to the control of existing equipment, use of AB2588 and AB1731 data and procedures do not conflict and are consistent with the provisions and requirements of existing state AB2588 and AB1731 procedures. The District should consider that the potential for conflict and inconsistencies exists and should ensure that such potential is taken into account in the proposed rule. For example, if a source triggers the provisions of Rule 1200(d)(1)(ii)(D) and the source has already identified certain reductions as part of the AB1731 process, would such plan be acceptable for purposes of proposed Rule 1200, or would the plan have to be modified to identify further reductions? If further reductions need be identified, how would such a modification fit in with proposed rule and existing AB1731 provisions?

To help in this concern, the District might consider including rule provisions which would allow the District to accept a risk prevention or risk reduction program developed to satisfy state or federal requirements in lieu of the risk reduction plan required in the proposed rule. This would allow sources to ensure that risk reduction plans are closely coordinated from an overall plant wide basis and include a deliberate strategy for risk reductions and are not an accumulation of plans put together for a series of projects. In addition, the rule does not appear to allow for the modification of these plans. Should subsequent projects or modifications to a facility be necessary, the rule does not appear to allow for the modification of the plans.

**DISTRICT RESPONSE**

A simple response to the example given would be that a plan designed to meet the SB 1731 program may not be adequate for purposes of Rule 1200(d)(1)(ii). However, the District will evaluate risk reduction plans developed for other regulatory programs on a case-by-case basis for adequacy in meeting the requirements of Subsection (d)(1)(ii). As noted in the response to Comment # 28, the project applicant may apply to the District to modify an Authority to Construct or Permit to Operate condition requiring implementation of an approved plan. The District will evaluate such application and modify the Authority to Construct or Permit to Operate if it agrees, on a case-by-case basis, such modification is warranted by the information presented by the applicant.

**39. WRITTEN COMMENT**

Air quality modeling of fugitive sources (e.g. haul roads, wind erosion, quarrying activities, etc.) using existing EPA approved models, including ISCST2, results in overprediction of actual off-site impacts. This is true for annual and 1-hour fence-line concentrations. Because of this it is recommended that area fugitive emissions be excluded from the calculation of both acute and long-term (carcinogenic and chronic) exposures and health risks.

**DISTRICT RESPONSE**

The District's Air Monitoring and Technical Services division reviewed this comment and stated that the Environmental Protection Agency's new ISC3 model should address the problems observed when ISC2 is used to model area and fugitive sources. The District recommends that

the ISC3 model be used to model area and fugitive emissions. The District will monitor this issue and, if warranted, revisit it at a later date.

**40. ARB COMMENT**

Instead of referring to the Maximum Achievable Control Technology requirements of Section 112 of the federal Clean Air Act, a reference to the requirements of Sections 111 and 112 should be made. This broader reference would cover situations like the Medical Waste Incinerator MACT adopted under Section 111 but which contains limits for HAPS.

**DISTRICT RESPONSE**

The District has revised the reference to Maximum Achievable Control Technology requirements in the federal Clean Air Act to specify "...Maximum Achievable Control Technology requirements adopted pursuant to either Section 111 or 112 of the federal Clean Air Act or to comply with ...".

**41. ARB COMMENT**

A risk cap should be established for the exemptions listed in Sections (b)(1)(v) - (viii). A risk cap of 100 per million and a total hazard index of 10 is suggested. Having such a cap would not make it necessary for all sources in these categories to do a health risk analysis. Based on the current work being done in the development of area-wide risk assessments for service stations and dry cleaners, simplified screening analyses (e.g. look-up tables or simplified computer model) will be available to easily determine if the risk cap is exceeded.

**DISTRICT RESPONSE**

As noted in the response to Comment #2, the ARB's suggested caps are contained in their Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants. They are simply guidelines for districts to consider when developing rules to regulate new and modified sources of toxic air contaminants. The ARB comment is intended to suggest that the District include an upper bound of allowable risk for exempt equipment.

When proposed Rule 1200 was developed, the addition of an upper bound to the exemptions was considered. It was decided not to do so because there was concern this would imply a risk assessment was required to ensure this upper bound was not exceeded. It was not the District's intent to require such sources prepare a risk assessment. Since the District was unaware of any exempted equipment that could have a risk that would approach a limit of 100 in one million, it was decided not to include such an upper limit in the exemption. However, in response to the ARB suggestion, an upper limit for cancer risk of 100 in one million has been added for exempt equipment. As suggested by ARB, the District will make use of look-up tables and other streamlining methods to ensure this upper risk limit is not exceeded without the need to perform a risk assessment.

**42. ARB COMMENT**

The phrase "...or any other emission limitation found by the Air Pollution Control Officer to be technically feasible..." should be added to the definition of T-BACT in Section (c)(23).

**DISTRICT RESPONSE**

The definition of T-BACT has been revised to conform to the definition suggested in the California Air Resources Board's Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants.

**43. ARB COMMENT**

Section (d)(1)(E) should be clarified that it is applicable only when off-site offsets are required.

**DISTRICT RESPONSE**

Section (d)(1)(E) has been revised to clarify the intent and applicability.

RJSm:jo

**AIR POLLUTION CONTROL DISTRICT  
COUNTY OF SAN DIEGO**

**PROPOSED NEW RULE 1200  
CHANGE COPY**

**RULE 1200. TOXIC AIR CONTAMINANTS - NEW SOURCE REVIEW**

**(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 of Section 111 or 112 of the Federal Clean Air Act or to comply with requirements of these rules and regulations adopted to implement federal ~~Maximum Achievable Control Technology~~ 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 ~~Air Toxic Control Measure~~ 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.

(vi) (B) Gasoline service station emission units, provided that T-BACT will be installed.

(vii) (C) Asphalt roofing kettles and tanks.

(viii) (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 Subsection (d)(1) and (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 specify 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). ~~in accordance with procedures developed by the state Office of Environmental Health Hazard Assessment (OEHHA) and approved for use with Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program).~~

(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 emis

sion 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 two or more parcels of land with a common boundary or separated solely by a public or private roadway or other public or private right-of-way. Non-adjoining parcels of land which are connected by a process line, conveyors, or other equipment shall be considered to be contiguous property. Non-adjoining parcels of land separated by bodies of water designated “navigable” by the U.S. Coast Guard shall not be considered contiguous properties.

(4) (5) **“Emission Unit”** means any article, machine, equipment, contrivance, process or process line which emits or may emit one or more toxic air contaminants.

(5) (6) **“Enforceable”** means can be enforced by the District through inclusion of conditions on a valid and current permit.

(6) (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, feed stock 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.

(7) (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.

(8) (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. ~~in accordance with procedures developed by the state Office of Environmental Health Hazard Assessment (OEHHA) and approved for use with Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB-1731 program).~~

(9) (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 previously 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.

(10)(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.

(11)(12) **“Post-Project Potential To Emit”** means an project’s or emission unit’s or an aggregation of emission units’ 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).

(12)(14) **“Pre-Project Potential To Emit”** means an project’s or emission unit’s or an aggregation of emission units’ potential to emit prior to issuance of an Authority to Construct for the proposed project or emission unit, calculated pursuant to Section (e).

~~If specific conditions limiting an 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 emission unit’s actual emissions or to a lower level of emissions, as the applicant and the Air Pollution Control Officer may agree, provided such limitation is enforceable through permit conditions.~~

(13)(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.

(14)(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.

(15)(17) **“Receptor Location”** means any location beyond the project’s or emission unit’s stationary source boundaries where the Air Pollution Control Officer has deter-



mined exposure to the project's or emission unit's (not including any emission unit modified to provide concurrent emission reductions) emissions could reasonably occur.

~~(16)~~(18) **"Relocated"** means moved within San Diego County from one stationary source to another stationary source.

~~(17)~~(19) **"Stationary Source"** means an emission unit or aggregation of emission units which are located on the same or contiguous properties and which units are under common ownership or entitlement to use. Stationary sources also include those emission units or aggregation of emission units located in the California Coastal Waters.

~~Properties shall be deemed to be contiguous properties if they are separated solely by a public roadway or other public right of way.~~

~~(18)~~(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 *(6 months before date of adoption)* 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 or the California Air Resources Board, 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.

~~(19)~~(21) **"Total Acute Noncancer Health Hazard Index"** means 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). ~~the procedures developed by the state Office of Environmental Health Hazard Assessment (OEHHA) and adopted for use with the state SB1731 program as affecting the same target organ system.~~

~~(20)~~(22) **"Total Chronic Noncancer Health Hazard Index"** means 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), the procedures developed by the state Office of Environmental Health Hazard Assessment (OEHHA) and adopted for use with the state SB1731 program as affecting the same target organ system.

~~(21)~~**(23)** **“Toxic Air Contaminant (TAC)”** means Hazardous Air Pollutants (HAP's) listed in Section 112 of the Federal Clean Air Act, or air contaminants listed in Tables 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 adopted 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.

~~(22)~~ **“Toxic Air Contaminant Potential to Emit”** means the maximum quantity of toxic air contaminant emissions, including fugitive emissions, that an emission unit is capable of emitting considering emission control equipment. ~~If the project applicant agrees to enforceable hourly, daily and/or annual limitations on the operation of the emission unit, and any associated emission control equipment, as a condition to receiving an Authority to Construct and/or Permit to Operate, such limitations shall be used to establish the toxic air contaminant potential to emit.~~

~~(23)~~**(24)** **“Toxics Best Available Control Technology (T-BACT)”** means the most stringent effective emission limitation or ~~the most effective~~ 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 in process and 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) T-BACT Not Applied. 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) T-BACT Applied. Except as provided below 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: ~~by the project applicant.~~

(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 ~~Maximum Achievable Control Technology~~ and ATCM ~~Air Toxic Control Measure~~ 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 ~~in excess of T-BACT~~ for the project type.

(iii) An estimate of the risk reduction potential of all future potentially feasible cancer risk reduction measures, ~~and measures in excess of T-BACT.~~

(iv) An estimate of how long it would take to implement all future potentially feasible cancer risk reduction measures, ~~and measures in excess of T-BACT.~~

(v) A determination of the technical feasibility and cost-effectiveness to implement all future potentially feasible cancer risk reduction measures, ~~and measures in excess of T-BACT for the project.~~

(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. ~~and measures in excess of T-BACT that will be implemented to reduce potential risk from the project, and a detailed schedule for implementation. If the plan shows that these measures are insufficient to reduce the increase in maximum incremental cancer risk to 10 in one million or less, the plan shall identify all potential reductions in the future.~~

(11) A discussion of how each requirement of Subsections (d)(1)(iii)(ii), (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)(ii)(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). ~~The project has satisfied all other requirements of this rule.~~

(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 having 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 are provided until the resulting increase in 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.

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) Emissions reductions which exceed an annualized cost per unit of maximum incremental cancer risk reduced of 1.25 times the annualized cost 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). are not required to be provided.

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 be ~~prepared in accordance with~~ meet the same requirements of 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 ~~in accordance with~~ 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 Office of Environmental Health Hazard Assessment~~, 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 ~~1~~ unless the Air Pollution Control Officer, after consulting with the state ~~OEHHA Office of Environmental Health Hazard Assessment~~, 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** *[Section (e) and Tables I, II, and III have been completely revised. See Attachment for a copy of the Workshop Draft.]*

(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 non-cancer 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 the Air Pollution Control Officer deems appropriate, based on the results of these screening procedures.

# Table I

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

Substance	Substance
Acetaldehyde	Ethylene dibromide
Acrylamide	(1, 2 - Dibromoethane)
Acrylonitrile	Ethylene dichloride
Arsenic	(1, 2 - Dichloroethane)
Arsenic compounds (inorganic)	Ethylene oxide
Asbestos	Formaldehyde
Benzene	Furans (chlorinated)
Benzidine (and its salts)	Hexachlorobenzene
Beryllium	Hexachlorocyclohexanes
Bis (chloromethyl) ether	Hydrazine
1,3-Butadiene	Methylene chloride (Dichloromethane)
Cadmium	Nickel and nickel compounds
Cadmium compounds	N-Nitrosodiethylamine
Carbon tetrachloride	N-Nitrosodimethylamine
Chlorinated dibenzo-p-dioxins (as 2, 3, 7, 8 - equivalents)	p-Nitrosodiphenylamine
Chlorinated dibenzofurans (as 2, 3, 7, 8 - equivalents)	N-Nitrosodi-n-butylamine
Chloroform	N-Nitrosomethylethylamine
Chlorophenols	N-Nitrosodi-n-propylamine
Pentachlorophenol	N-Nitrosopyrrolidine
2, 4, 6 - Trichlorophenol	PCBs (Polychlorinated biphenyls)
Chloroprene	PAHs (Polycyclic aromatic hydrocarbons) including, but not limited to:
Chromium (hexavalent)	Benz[a]anthracene
Coke oven emissions	Benzo[b]fluoranthene
1, 2 - Dibromo -3- chloropropane (DBCP)	Benzo[k]fluoranthene
p-Dichlorobenzene	Benzo[a]pyrene
(1, 4 - Dichlorobenzene)	Dibenz[a,h]anthracene
3,3' - Dichlorobenzidine	Indeno[1,2,3-cd]pyrene
Di (2 -ethylhexyl) phthalate (DEHP)	Perchloroethylene (Tetrachloroethylene)
1, 4 - Dioxane	Propylene oxide
Dioxins (chlorinated) (see chlorinated dibenzo-p-dioxins)	Trichlorethylene
Epichlorohydrin	Urethane
	Vinyl chloride

- 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 II

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

Substance	Substance
Acetaldehyde	Epichlorohydrin
Acrolein	Ethyl acrylate
Acrylamide	Ethyl chloride
Acrylonitrile	Ethylene Dibromide (1, 2 - Dibromoethane)
Ammonia	Ethylene Dichloride (1, 2 - Dichloroethane)
Arsenic	Ethylene glycol butyl ether
Benzene	Ethylene glycol monethylether
Benzidine (and its salts)	Ethylene glycol ethyl ether acetate
Benzyl chloride	Ethylene glycol methyl ether
Beryllium	Ethylene glycol methyl ether acetate
Bromine	Ethylene oxide
Bromine compounds	Formaldehyde
Hydrogen bromide	gamma-Hexachlorocyclohexane
Bromine pentafluoride	Gasoline vapors
Cadmium	Glutaraldehyde
Carbon tetrachloride	Hexachlorobenzene
Chlorinated dibenzo-p-dioxins (as 2, 3, 7, 8 - equivalents)	Hexachlorocyclopentadiene
Chlorinated dibenzofurans [as 2, 3, 7, 8 - equivalents]	Hydrazine
Chlorine	Hydrochloric acid
Chlorobenzene (monochlorobenzene)	Hydrogen cyanide
Chlorofluorocarbons	Hydrogen fluoride
Chloroform	Hydrogen sulfide
Chlorophenols	Isocyanates
2-Chlorophenol	Toluene-2, 4-diisocyanate
Pentachlorophenol	Toluene-2, 6-diisocyanate
Tetrachlorophenols	Methyl isocyanate
Chloropicrin	Lead and compounds
Chloroprene	Maleic anhydride
Chromium (hexavalent)	Manganese and compounds
Copper	Mercury and compounds (inorganic)
Cresols (o, m, p)	Methanol
Dibenzodioxins (chlorinated) (see chlorinated dibenzo-p-dioxins)	Methyl bromide
Dibenzodioxins (chlorinated) (see chlorinated dibenzofurans)	Methyl chloroform (1, 1, 1 - TCA)
1, 2 - Dibromo-3-chloropropane (DBCP)	Methylene chloride
p - Dichlorobenzene (1, 4 - Dichlorobenzene)	4, 4' - Methylene dianiline (and its dichloride)
1, 4- Dioxane	Methyl mercury
Di(2-ethylhexyl) phthalate	methyl methacrylate
Dimethylamine	Mineral fibers (< 1% free silica)
	Naphthalene
	Nickel and nickel compounds
	Nitrobenzene
	2 - Nitropropane

**Table II - continued**

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

Substance	Substance
Ozone	Styrene
Perchloroethylene (Tetrachloroethylene)	Sulfates
Phenol	Toluene
Phosphine	Trichloroethylene
Phosphorous (white)	Vinyl chloride
Phthalic anhydride	Vinylidene chloride
PCBs (Polychlorinated biphenyls)	Xylenes
Propylene oxide	Zinc compounds
Selenium compounds	
Sodium hydroxide	

- 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 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

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

Chemical	Chemical
Ammonia	Hydrogen fluoride
Acrolein	Hydrogen sulfide
Arsine	Maleic anhydride
Benzyl chloride	Mercury (inorganic)
Carbon tetrachloride	Methyl chloroform
Chlorine	Methylene chloride
Copper and compounds	Nickel compounds
1, 4 - Dioxane	Ozone
Ethylene glycol methyl ether	Perchloroethylene (Tetrachloroethylene)
Ethylene glycol ethyl ether	Phosgene
Ethylene glycol monoethyl ether acetate	Propylene oxide
Ethylene glycol monobutyl ether	Selenium
Formaldehyde	Sodium hydroxide
Hydrochloric acid	Sulfates
Hydrogen cyanide	Xylenes

- 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.