AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

DATE: May 15, 1996

TO: Air Pollution Control Board

SUBJECT: Adoption of New Rule 1210 (Toxic Air Contaminant Public Health Risks - Public Notification And Risk Reduction)

SUMMARY:

The Air Toxics "Hot Spots" program requires the operator of a business to notify exposed individuals if a district determines there is a significant health risk associated with emissions from that business based on a health risk assessment. It requires facilities to reduce risks to below significant levels, generally within five years.

Rule 1210 specifies criteria and procedures for public notification and risk mitigation. It establishes facility-wide public notification levels at 10 in one million or more for cancer risk, one or more for cancer burden and a total health hazard index of 1.0 or more (up to 5.0 with concurrence of the state Office of Environmental Health Hazard Assessment) for noncancer acute and chronic health risk. Facility-wide risk mitigation levels are established at 100 in one million or more for cancer risk, one or more for cancer burden and a total health hazard index of 1.0 or more (up to 5.0 with concurrence of the state Office of Environmental Health Hazard Assessment) for noncancer acute and chronic health risk.

Businesses that have reduced toxic air contaminants are allowed to use data from updated risk assessments if an analysis indicates their public notification or risk mitigation requirements would likely change as a result.

There are issues. One environmental group and some public members believe Rule 1210 should not allow risk notification and mitigation requirements to be based on updated risk assessments. They want these requirements based on risk assessments using 1989 emissions data. They also want the significant risk level for risk mitigation to be reduced from the proposed 100 in one million to 10 in one million. In addition, there may be one or more affected facilities that would like the option of notifying the public through the newspaper rather than directly by mail.

Issue

Should the Board adopt new Rule 1210 specifying public notification levels and risk mitigation levels, and public notification requirements and procedures?

Recommendation

AIR POLLUTION CONTROL OFFICER

Adopt the resolution adding new Rule 1210 and make appropriate findings:

(i) of necessity, authority, clarity, consistency, non-duplication and reference as required by Section 40727 of the State Health and Safety Code;

(ii) that the adoption of new Rule 1210 will alleviate a problem and will not interfere with attainment of ambient air quality standards (Section 40001 of the State Health and Safety Code);

(iii) that the adoption of new Rule 1210 will not significantly affect air quality or emissions limitations, and that an assessment of socioeconomic impacts is not required (Section 40728.5 of the State Health and Safety Code); and

(iv) that there is no reasonable possibility that the adoption of Rule 1210 may have a significant effect on the environment and that Rule 1210 is exempt from the provisions of the California Environmental Quality Act.

Advisory Statement

The Air Pollution Control District Advisory Committee recommended adopting proposed new Rule 1210 at the April 24, 1996 meeting. One member was opposed because this member wanted public notifications to be made based on 1989 emissions data and associated risk, and wanted the significant risk level for purposes of cancer risk mitigation established at 10 in one million instead of the proposed 100 in one million.

Fiscal Impact

Adopting the proposed new Rule 1210 will have no fiscal impact on the District.

Alternatives

Not adopt the proposed new Rule 1210. The Board could decide not to adopt a rule to implement these requirements of the Air Toxics "Hot Spots" program. In this case, the District would implement the program by policy. This alternative is not recommended because this is clearly a Board policy issue.

Adopt new Rule 1210 but require public notifications based on 1989 emissions and risk data. This alternative is not recommended because businesses that have made significant toxic air contaminant reductions since 1989 would not receive any credit. The District does not believe it is appropriate to require the public be notified of exposure to emissions and associated risks that no longer exist. Any public notifications based on updated risk assessments will include a statement that risk assessments based on 1989 emissions are available for public review at the District offices.

Adopt new Rule 1210 but require a cancer risk mitigation level of 10 in one million or greater instead of 100 in one million or greater. A cancer risk level of 10 in one million or more would be inconsistent with nearly all other air pollution control districts in California which have established the cancer risk mitigation level at 100 in one million. The two districts having a 10 in one million level have no affected facilities. In addition, proposed Rule 1200 specifies an allowable cancer risk increase of 10 in one million or less from individual new and modified projects (pieces of equipment) equipped with toxics best available control technology. Adopting a cancer risk mitigation level of 10 in one million in Rule 1210 would mean that the facility-wide risk from an existing business would be held to the same standard as a new or modified business required to use toxics best available control technology to comply. This could mean that existing businesses would have to upgrade their equipment and emission control technology to essentially those of a new facility. This would be prohibitively costly.

BACKGROUND:

History

The Air Toxics "Hot Spots" Act (AB 2588) requires existing businesses to inventory and report toxic air contaminant emissions and, if the emissions represent a potential adverse public health impact, conduct a public health risk assessment. If the risk assessment shows the public is being exposed to a significant risk, the business must notify the affected public. A significant risk must be mitigated to below significant risk levels over a five-year period. This period can be extended by the District if it will not result in an unreasonable risk to the public and implementing a risk reduction audit and plan in a five-year period would impose an unreasonable economic burden on the business, or if it is not technically feasible to reduce the risk in a five-year period. The period can be shortened if it is technically feasible and economically practicable for the facility to do so and the District finds the facility emissions pose an unreasonable health risk.

State law does not define the significant risk level or specify procedures facilities must use for public notification or risk mitigation; districts must. The notification procedures specified in Rule 1210 have been adapted from the California Air Pollution Control Officers Association (CAPCOA) Air Toxic "Hot Spots" Program Public Notification Guidelines prepared by the Air Toxics Committee of CAPCOA. They also reflect input from local businesses, academic institutions, and environmental organizations. The notification procedures, and notification and risk mitigation levels specified in Rule 1210 are consistent with those adopted by other California districts.

Terminology

A health risk assessment is an analysis estimating the increased chance of developing adverse health effects as a result of exposure to toxic air contaminants. Both cancer and health impacts are evaluated. Risk assessments must be approved by the District and the state Office of Environmental Health Hazard Assessment (OEHHA).

Risk isopleths are lines on a map showing where the risk is the same. For example, there are risk isopleths showing where the estimated maximum cancer risk is one in one million or less, 10 in one million or less, and so on. Risk isopleths are developed from computerized models that evaluate meteorological and other data specific to an emission source and calculate the resulting risk.

Cancer risk is an estimate of the maximum possibility of a person developing cancer as a result of a lifetime (70 years) of continuous exposure to a toxic air contaminant emitted from one or more

emission sources. It is usually presented in terms of the increased number of chances in one million of developing cancer. For example, a cancer risk of eight in one million means that if a population of one million people were exposed to a specific concentration of a given toxic air contaminant 24 hours per day, 365 days per year, for 70 continuous years, not more than eight additional incidents of cancer would result.

Cancer burden is the estimated potential increase in the occurrence of cancer cases in a population subject to a cancer risk of greater than one in one million from exposure to toxic air contaminants.

Noncancer risk is evaluated in terms of a health hazard index which is the ratio of the estimated maximum emission concentration to which a person is exposed to the concentration deemed acceptable for acute (short-term) and chronic (long-term) exposure periods. A health hazard index of one or less is deemed an acceptable human exposure by health experts. When more than one contaminant impacts the same body organs, individual health hazard indices are summed to give a Total Health Hazard Index. Acceptable health effects data is provided by the state Office of Environmental Health Hazard Assessment (OEHHA). For purposes of this program, chronic exposure means exposure over a period of one year or more. Acute exposure means exposure over a one-hour period.

Rule Requirements

Rule 1210 was developed with input from businesses, environmental groups and the public. It establishes the criteria and procedures for requiring public notification and mitigating health risks. Rule 1210 is consistent with state guidelines for the Air Toxics "Hot Spots" program.

Specifically, Rule 1210 accomplishes the following:

Public Notification

- Public notification is required for a cancer risk of 10 in one million (10×10^{-6}) or more or a cancer burden (potential increase in the occurrence of cancer cases) of one (1) or greater.

- For non-cancer chronic (long-term) and acute (short-term) exposures, public notification is required for a Total Hazard Index of 1.0 or more. However, in such cases, OEHHA will be consulted and it may approve a Total Hazard Index of up to 5.0 before public notification will be required.

- Public notification must be based on health risk assessments using 1989 emissions data unless: (1) the District has approved an updated risk assessment for the facility, or (2) an approved updated inventory report indicates risks have likely dropped below public notification or risk mitigation levels which will change facility notification or mitigation requirements.

- A Public Notification Plan must be submitted for District review and approval, and implemented within 30 days of plan approval. Notifications must be mailed directly to residents, workplaces, schools, day care centers, hospitals, and convalescent homes. If five percent or more of recipients within any census tract are non-English speaking, multilingual notifications are required. Notifications are required biennially until risks are below notification levels. Businesses must provide additional information concerning health risk within 30 days of request and hold public meetings if there is public interest. Community public meetings are required if significant public interest is demonstrated.

Risk Reduction

- The significant risk level requiring risk mitigation is a cancer risk of 100 in one million (100×10^{-6}) or more , or a cancer burden of one or greater.

- For non-cancer chronic and acute exposures, the significant risk level requiring mitigation is a Total Hazard Index of 1.0 (up to 5.0 after consultation with the state Office of Environmental Health Hazard Assessment).

- Risk mitigation must be based on health risk assessments using 1989 emissions data unless: (1) the District has approved an updated risk assessment for the facility or, (2) an approved updated inventory report indicates risks have likely dropped below risk mitigation levels which will change facility mitigation requirements.

- Risks exceeding significant risk levels must be reduced below these levels in accordance with a District-approved risk reduction plan over a five-year period which can be extended or shortened by the District. There are provisions for public review and comment on plans. Annual notifications are required until risks are below risk mitigation levels. Biennial notifications are required until risks are below public notification levels.

Issues

Should public notification be based on 1989 or updated risk data? One environmental group and public members strongly state that public notifications should be based on 1989 data and the associated health risk assessment, rather than on updated information and analysis. They believe the public has a right-to-know this information.

Some businesses have made significant emissions reductions since 1989 and the business sector strongly believes these reductions should not be ignored and they should be allowed to update risk assessments. They believe it is more appropriate to advise the public of current risks rather than risks that may not exist. The District is recommending that it is appropriate to allow some facilities to update risk assessments and use this data when determining if public notification and risk mitigation are required for the following reasons:

(1) some businesses have voluntarily reduced emissions and associated risk impacts;

(2) emission factors have been refined, toxicity's of some compounds have changed; and,

(3) risk evaluation techniques have been refined.

County Counsel concurs that allowing facilities to notify based on updated risk assessments is allowed by state law.

Rule 1210 specifies that businesses having a revised risk assessment approved by the District prior to the date District notice is given that public notification is required, will be allowed to notify based on the updated risk assessment. Businesses that have done little or nothing to reduce risks since 1989 will not be allowed to delay public notifications by simply stating they want to prepare a revised risk assessment. Only businesses demonstrating, to the District's satisfaction and using District-approved emissions estimates, that emissions have been reduced to below significant risk levels or are no longer subject to public notification requirements within 60 days after rule adoption will be allowed time to update their risk assessment and notify the public based

on the results. Facilities that cannot make such a demonstration will be required to notify the public based on 1989 emissions and associated risk.

Should public notification be by direct mail or a combination of media and direct mail? Because of the cost of direct mail public notifications, the District originally proposed to meet public notification requirements by requiring direct mail notifications for cancer risks greater than 50 in one million and allow businesses to notify, either through direct mail or by alternative media (e.g. newspaper) notification, for cancer risks between 10 and 50 in one million. One environmental group and public members objected stating that direct mail notification was more effective than media notification and some members of the affected public do not read or cannot afford a newspaper and, therefore, would be deprived of notification if the media option was selected. In response, the District updated costs and determined that while media notification was less expensive, the cost differential was not that significant. In addition, the District discussed with affected businesses whether they would actually use the media alternative. They stated they would likely use direct notification for all their notification requirements even if a media option was provided for risks between 10 and 50 in one million. Based on this, Rule 1210 requires public notification by direct mail only. The District recently received comments that indicate some facilities may again want a media notification option for risks between 10 and 50 in one million.

Should the risk level for mitigation purposes be 10 or 100 in one million or greater? Rule 1210 establishes a facility-wide risk mitigation level of 100 in one million or greater for cancer risk and one or greater for cancer burden. Facilities must mitigate or reduce risk to this level or less over a five-year period. This period can be increased or decreased by the District under specified conditions. One environmental group and public members believe this level should be reduced to 10 in one million. They assert that this level has been established by other California statutes and by other air districts for use in the Air Toxics "Hot Spots" program.

Prior to proposing a 100 in one million risk mitigation level the District surveyed the South Coast, Bay Area, Ventura, San Joaquin Valley, Mojave Desert, Santa Barbara, Sacramento and Monterey Bay districts and determined all but the Sacramento and Monterey Bay districts use a 100 in one million cancer risk mitigation level. The Sacramento and Monterey Bay districts indicated a level of 10 in one million was selected because no sources would be affected. Locally, several dozen facilities would potentially be affected at a risk mitigation level of 10 in one million.

Additionally, it is not appropriate to compare risk thresholds established for other regulatory programs to those established for the "Hot Spot" Program. Other programs such as Proposition 65, the Federal Clean Air Act residual risk provisions (112(f)), and state toxics new source review programs generally do not establish a risk threshold for an entire industrial facility. Instead these risk thresholds apply to a single compound (as in Prop. 65), a single process (as in federal Maximum Achievable Control Technology (MACT) standards), or a single project at a stationary source (as in air toxic new source review programs). Therefore, a comparison of these thresholds to those established for the "Hot Spots" program is not valid.

On February 2, 1993, the Board directed that, with the exception of a regulation requested by business or a regulation for which a socioeconomic impact assessment is not required, no new or revised regulation shall be implemented unless specifically required by federal or state law. The proposed new Rule 1210 is consistent with this Board directive since it implements the public notification and risk mitigation requirements of the state Air Toxics "Hot Spots" program. In addition, a socioeconomic impact assessment is not required.

The California Environmental Quality Act (CEQA) requires an environmental review for certain actions. No significant adverse impacts on the environment have been suggested; no such impacts are reasonably possible. Adopting new Rule 1210 will not have a significant effect on the environment and is exempt from the provisions of the California Environmental Quality Act.

A workshop on the proposed public notification procedures was held on November 21, 1995 and a workshop on Rule 1210 was held on April 9, 1996. The workshop reports are attached.

Concurrence:

GARY R. STEPHANY
Chief Administrative Officer (Acting)

Respectfully submitted,

BY: ROBERT R. COPPER
Deputy Chief Administrative Officer (Acting)

R.J. SOMMERVILLE
Air Pollution Control Officer

SUBJECT: Adoption of New Rule 1210 (Toxic Air Contaminant Public Health Risks - Public Notification and Risk Reduction)

4/29/96

COUNTY COUNSEL APPROVAL: Form and Legality [X] Yes [ ] N/A
[ ] Standard Form [ ] Ordinance [X] Resolution

CHIEF FINANCIAL OFFICER/AUDITOR REVIEW: [ ] Yes [X] N/A
4 votes: [ ] Yes [X] No

CONTRACT REVIEW PANEL: [ ] Approved _____ [X] N/A

PREVIOUS RELEVANT BOARD ACTION: N/A

BOARD POLICIES APPLICABLE: N/A

CONCURRENCES: N/A

ORIGINATING DEPARTMENT: Air Pollution Control District, County of San Diego

CONTACT PERSON: Richard J. Smith, Deputy Director 750-3303 MS: 0-176

R.J. SOMMERVILLE
DEPARTMENT AUTHORIZED REPRESENTATIVE

MAY 15, 1996
MEETING DATE

RESOLUTION NO. 96-164

WEDNESDAY, JUNE 12, 1996

NEW ADDED RULE

Re Rules and Regulations of the)
Air Pollution Control District)
of San Diego County . . . . .)

**RESOLUTION ADDING RULE 1210
TO REGULATION XII
OF THE RULES AND REGULATIONS OF THE
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT**

On motion of Member Cox, seconded by Member Slater the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

New Rule 1210 is to read as follows:

RULE 1210. TOXIC AIR CONTAMINANT PUBLIC HEALTH RISKS - PUBLIC NOTIFICATION AND RISK REDUCTION

(a) APPLICABILITY

This rule is applicable to each stationary source required to prepare a public health risk assessment pursuant to Section 44360 of the Health and Safety Code.

(b) EXEMPTIONS

The provisions of Sections (d) and (e) of this rule shall not apply to stationary sources for which industry-wide generic public health risk assessments are prepared by the Air Pollution Control Officer pursuant to Section 44323 of the Health and Safety Code.

(c) DEFINITIONS

(1) **"Airborne Toxic Risk Reduction Measure"** means changes at a stationary source that reduce or eliminate toxic air contaminant emissions subject to this rule. Airborne toxic risk reduction measures may include changes in production processes, feed stock modifications, product reformulations, production system modifications, system

enclosures, emissions capture, emissions control, emissions conversion, or modifications to operational standards or practices. Airborne toxic risk reduction measures do not include measures which will result in an increased health risk to the public from exposures to the toxic chemical in another media, nor which will result in an increased health risk to stationary source workers or the consumer.

(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.

(3) **"Contiguous Property"** means the same as defined in Rule 2 of these Rules and Regulations.

(4) **"Emission Inventory Report"** means a document that identifies and describes sources of toxic air contaminant emissions at a stationary source, characterizes the nature of the discharge of such contaminants, and estimates the types and amounts of toxic air contaminants emitted from each source.

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

(6) **"Individual Substance Acute Health Hazard Index"** means, for each air contaminant, the ratio of the maximum estimated concentration of that contaminant in the ambient air for the specified averaging time for a given potential acute health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(7) **"Individual Substance Chronic Health Hazard Index"** means, for each air contaminant, the ratio of the maximum estimated concentration of that contaminant in the ambient air for the specified averaging time for a given potential chronic health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(8) **"Industry-Wide Generic Public Health Risk Assessment"** means a study to identify, characterize and quantify the potential public health risks that may result from emissions of toxic air contaminants from a class of stationary sources which the Air Pollution Control Officer finds meets all of the following:

(i) All stationary sources within the class fall within one four-digit Standard Industrial Classification Code.

(ii) Individual preparation of emission inventory reports and public health risk assessments would impose severe economic hardships on the majority of stationary sources within the class.

(iii) The majority of the class is composed of small businesses.

(iv) Releases of toxic air contaminants from individual stationary sources in the class can easily and generically be characterized and calculated.

(9) **"Maximum Incremental Cancer Risk"** means the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants emitted from a stationary source.

(10) **"Prioritization Score"** means a value indicative of a stationary source's toxic air contaminant emissions strength, arrived at by use of emissions data contained in

an approved emission inventory report, air contaminant toxicity data recommended by the state Office of Environmental Health Hazard Assessment, and a calculation methodology established by the Air Pollution Control Officer. Separate prioritization scores are determined for toxic air contaminants with the potential for causing carcinogenic effects, noncarcinogenic acute effects, and noncarcinogenic chronic effects.

(11) **"Public Health Risk Assessment"** means a study to identify, characterize and quantify the estimated potential cancer and noncancer public health risks that may result from public exposure to emissions of toxic air contaminants emitted from one or more emission units at a stationary source.

(12) **"Risk Reduction Audit and Plan"** means a study prepared by the owner or operator of a stationary source which identifies sources and emissions of toxic air contaminants at the stationary source that result in potentially significant public health risks and which proposes airborne toxic risk reduction measures that are sufficient to reduce potential public health risks from such emissions to less than significant risk mitigation levels as specified in this rule.

(13) "**School**" means any public or private school used for the education of more than 12 children in one or more grades from kindergarten through grade 12, but does not include any school in which education is primarily conducted in a private home.

(14) "**Small Business**" means the same as defined in Government Code Section 11342(e).

(15) **"Stationary Source"** means the same as defined in Rule 2 of these Rules and Regulations.

(16) **"Total Acute Noncancer Health Hazard Index"** means the estimated potential risk of acute public health effects and is the sum of the individual substance acute health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants emitted from a stationary source and identified in Table III.

(17) "**Total Chronic Noncancer Health Hazard Index**" means the estimated potential risk of chronic public health effects and is the sum of the individual substance chronic health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants emitted from a stationary source and identified in Table II.

(18) **"Toxic Air Contaminant"** means the air contaminants listed in Table I (carcinogenic), Table II (noncarcinogenic-chronic) or Table III (noncarcinogenic-acute), which have a health standard approved by the state Office of Environmental Health Hazard Assessment (OEHHA) and are 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 replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993.

The Air Pollution Control Officer may revise Tables I, II or III upon OEHHA adoption of revised CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines or upon OEHHA adoption of any health risk assessment guidelines or revisions pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 procedures) that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk

Assessment Guidelines, October, 1993, or with the concurrence of OEHHA and 30 days after public notice of the proposed changes is published in a newspaper of general circulation. A member of the public may petition the Air Pollution Control Officer to add air contaminants to these tables.

(d) PUBLIC HEALTH RISK NOTIFICATION REQUIREMENTS

(1) Except as provided in Subsections (d)(2) and (d)(3), the owner or operator of each stationary source for which a public health risk assessment has been approved by the Air Pollution Control Officer and which risk assessment indicates potential public health risks at or above the levels specified in Subsections (d)(1) (i), (ii), (iii) or (iv) shall provide written public notice of such risks. Public notice shall be by direct mailing, to each resident, business, parent or guardian of each student, and administrators of each school, hospital, day care center, convalescent home and any other sensitive receptor potentially exposed to such risks as specified by the Air Pollution Control Officer. Unless the health risk assessment for a stationary source is based on the estimated toxic air contaminant emissions at the source during calendar year 1989, the Air Pollution Control Officer will notify the owner or operator within 15 days after District approval of a health risk assessment whether public notice of such risks is required. If the approved public health risk assessment indicates potential public health risks at or above the levels specified in Subsections (e)(1) or (e)(2), as applicable, the Air Pollution Control Officer will indicate in the notification to the owner or operator that the owner or operator must also comply with Section (e) of this rule.

(i) Maximum incremental cancer risks equal to or greater than 10 in one million, or

(ii) Cancer burden equal to or greater than 1.0, or

(iii) Total acute noncancer health hazard index equal to or greater than 1.0, or

(iv) Total chronic noncancer health hazard index equal to or greater than 1.0.

Upon receipt of written notice from the Air Pollution Control Officer that the approved public health risk assessment indicates potential public health risks equal to or greater than the above levels, the owner or operator shall provide written public notice in accordance with the provisions of Subsections (d)(5) through (d)(15) of this rule.

(2) Written public notice shall not be required for a total acute or chronic noncancer health hazard index equal to or greater than 1.0 but less than 5.0 if the Air Pollution Control Officer determines, after consultation with the state Office of Environmental Health Hazard Assessment, that adverse public health effects are unlikely to occur at the levels of exposure estimated in the approved public health risk assessment.

(3) If the approved public health risk assessment for a stationary source is based on estimated toxic air contaminant emissions at the source during calendar year 1989, the written public notice required by Subsection (d)(1) shall be based on the 1989 emissions-based approved risk assessment unless the owner or operator of the stationary source has:

(i) Submitted an updated emission inventory report which has been approved by the Air Pollution Control Officer by (*date of rule adoption*), and

(ii) Demonstrated, by (*45 days after rule adoption*), to the satisfaction of the Air Pollution Control Officer that potential public health risks are likely to have dropped:

(A) From equal to or greater than to below any of the public notification levels specified in Subsection (d)(1) or (d)(2), or

(B) From equal to or greater than to below any of the significant risk mitigation levels specified in Subsection (e)(1) or (e)(2), or

(C) By at least 80% from any of the overall facility cancer or non-cancer risk levels in the approved health risk assessment based on toxic air contaminant emissions during calendar year 1989, and

(iii) Demonstrated, by (*45 days after rule adoption*), to the satisfaction of the Air Pollution Control Officer that the decreases in indicated public health risks are the result of: permanent, quantifiable and enforceable changes in estimated emissions; changes in emission factors or methods of estimating emissions or toxic air contaminant exposure levels approved by the Air Pollution Control Officer; or, changes in toxicity, cancer potency, acceptable public exposure levels, or methods for estimating public exposures recommended by the state Office of Environmental Health Hazard Assessment, and

(iv) Prepared and submitted an updated public health risk assessment in accordance with the following schedule:

(A) Within 45 days after receipt of a final determination from the Air Pollution Control Officer that the stationary source is eligible to base the public notification required by Subsection (d)(1) on an updated public health risk assessment, submit for approval by the Air Pollution Control Officer a protocol describing the manner by which the updated public health risk assessment will be conducted.

(B) Within 90 days of approval of the protocol, submit an updated public health risk assessment to the Air Pollution Control Officer for approval. The updated health risk assessment shall be prepared following the approved protocol.

(C) Within 30 days of written notice from the Air Pollution Control Officer identifying any deficiencies in the updated public health risk assessment, revise and resubmit for approval a corrected risk assessment that addresses those deficiencies.

If an updated public health risk assessment has been prepared and approved pursuant to this Subsection (d)(3), the written public notice required by Subsection (d)(1) shall be given based upon the results of the updated health risk assessment and in accordance with the provisions of Subsections (d)(5) through (d)(15) of this rule. Public notice shall be given upon receipt of written notice from the Air Pollution Control Officer that the updated risk assessment has been approved and that the results indicate potential public health risks above the levels specified in Subsection (d)(1)(i), (ii), (iii), or (iv) or (d)(2) or (e)(1) or (e)(2), if applicable. In the event an updated health risk assessment is disapproved, or the owner or operator fails to comply with the schedule for updating a risk assessment specified in this Subsection (d)(3), the Air Pollution Control Officer shall require the owner or operator to provide public notice and, if applicable, comply with the provisions of Section (e) based on the most recent approved public health risk assessment for the stationary source.

(4) In implementing the provisions of Subsection (d)(3), the Air Pollution Control Officer shall:

(i) By (*15 days after rule adoption*), make a preliminary determination of each affected stationary source's eligibility to update its public health risk assessment and provide written notice of the preliminary determination to each affected stationary source. The preliminary determination shall be based on the most recent approved emission inventory report for the stationary source, updated stationary source prioritization scores, stationary source permit information, and stationary source supplied information, and

(ii) Provide the public and the owner or operator of each affected stationary source 30 days to submit written comments on the preliminary determination and to submit any relevant additional information, and

Provide notice of the preliminary determinations in a newspaper of general circulation. Such notice shall contain the name and location of each affected stationary source, and the preliminary determination made for each source. The notice shall state that the materials on which the Air Pollution Control Officer based the determinations are available for review at the District, and that the District in making a final determination of each source's eligibility to update its risk assessment will consider all written comments and any relevant additional information submitted within the 30-day comment period described above. The notice shall also state that written public notice may be required to be given to fewer persons under a revised risk assessment than under the 1989 emissions-based public health risk assessment, and that the 1989 emissions-based public health risk assessments are available for review at the District. The notice shall also state the schedule for the District to receive any updated risk assessments, and that the updated risk assessments will be available for review at the District, and

(iii) By (*75 days after rule adoption*), make a final determination of each affected stationary source's eligibility to update its public health risk assessment and provide written notice of the final determination to each affected stationary source, and

(iv) Within 30 days of receipt of a risk assessment protocol submitted pursuant to Subsection (d)(3)(iv)(A), approve or revise and approve the protocol and provide written notice of the approval to the owner or operator of the affected stationary source, and

(v) Provide notice of receipt of an updated risk assessment to any person who requests such notice, and within 60 days of receipt of an updated public health risk assessment submitted pursuant to Subsections (d)(3)(iv)(B) or (d)(3)(iv)(C), approve, revise and approve, or disapprove the risk assessment and provide written notice of the approval or disapproval to the owner or operator and notice of whether the results of the most recently approved public health risk assessment indicate potential public health risks above the levels specified in Subsection (d)(1).

(5) Within 45 days of the date of written notice from the Air Pollution Control Officer that public notification is required pursuant to Subsections (d)(1) or (d)(3) of this rule, the owner or operator of a stationary source shall prepare and submit to the Air Pollution Control Officer, for approval, a public notification plan. The plan shall include all of the following:

(i) A proposed public notification letter to be signed by the Air Pollution Control Officer. The proposed notification letter shall be identical in form and text

to the model notification letter provided by the Air Pollution Control Officer and shall include the additional stationary source-specific information required by the model notification letter. If notification is based on an updated risk assessment pursuant to Subsection (d)(3), the letter shall state that the 1989 emissions-based risk assessment is available at the District for review by interested members of the public.

(ii) Any proposed optional stationary source informational letter to accompany the public notification letter.

(iii) The name and phone number of the person responsible for coordinating public notification for the stationary source.

(iv) A description of the proposed methodology, such as the use of a mailing service, for obtaining the addresses of residents and persons to be notified and for carrying out the notification process.

(v) A list of all zip codes or census tracts to be included in the notification, and the estimated total number of notification letters to be mailed.

(vi) A list of all schools, hospitals, day care centers, convalescent homes and other sensitive receptors to be notified.

(vii) A list of the primary languages spoken by non-English speaking persons in the area to receive notification where such language is the primary language of five percent or more of the total persons to be notified in any census tract in the area to receive notification.

(viii) A proposed method for responding to public comments and requests.

The Air Pollution Control Officer shall approve, or revise and approve, the public notification plan within 30 days of receipt of the plan.

(6) The owner or operator of a stationary source required to provide written public notice pursuant to this rule shall implement the stationary source public notification plan, as approved by the Air Pollution Control Officer, within 30 days of the date of written notice from the Air Pollution Control Officer of such approval. Each written public notice shall be mailed via the U.S. Postal Service and shall contain only:

(i) The approved public notification letter signed by the Air Pollution Control Officer.

(ii) An "Air Toxics Hot Spots Fact Sheet" and a "Public Response Survey Card" reproduced from originals provided by the Air Pollution Control Officer.

(iii) Any stationary source informational letter that has been approved by the Air Pollution Control Officer.

(iv) For each public notification directed to a business, a request that the business post or circulate the District public notification letter for review by all on-site employees of the business.

(v) At the option of the owner or operator of the stationary source, a notice to carry out the warning requirements of Section 25249.6 of the Health and Safety Code provided such notice has been determined by the Air Pollution Control Officer

not to conflict with the intent or content of the public notifications required by this rule.

(7) Multilingual notifications shall be provided by the owner or operator of a stationary source required to provide public notification pursuant to this rule if five percent or more of the recipients within any census tract in the area to receive notification are non-English speaking. In such case, the notifications shall be provided in those languages which are the primary language of five percent or more of the total persons to be notified in that census tract.

(8) Any stationary source informational letter to be included in the notification required by this rule shall be approved by the Air Pollution Control Officer and shall enhance and not undermine the public health risk notification process. The stationary source informational letter may include:

(i) A discussion of air contaminants emitted, emission rates, and the reasons why the emissions occur.

(ii) A discussion of steps taken, or future steps planned, by the stationary source to reduce emissions or risks to the public. The owner or operator shall document to the Air Pollution Control Officer any such steps taken and/or provide a written commitment to the Air Pollution Control Officer for any steps planned.

(iii) A brief and factual discussion of the risk assessment results and the uncertainties and conservatism of the risk assessment.

(iv) The name, address and phone number of a stationary source contact regarding the public notification and the risk assessment.

(9) Each public notification shall be mailed in an envelope supplied by the Air Pollution Control Officer. The envelope shall be marked with the name and address of the Air Pollution Control District and the words "Public Health Information" if mailed to areas where the approved health risk assessment indicates potential risks below the significant risk mitigation levels specified in Section (e) of this rule. The envelope shall be marked with the words "Public Health Notice" if mailed to areas where the approved health risk assessment indicates potential risks at or above the significant risk mitigation levels.

(10) If the owner or operator of a stationary source fails to carry out the public notification requirements of this rule, the Air Pollution Control Officer shall carry out such notification at the earliest possible date. All District costs of such notification shall be paid by the owner or operator of the stationary source.

(11) The parents or legal guardians of students attending schools with potential exposure to risks above the notification levels specified in Subsection (d)(1) shall be notified by one of the following methods as determined by the administrator of the affected school:

(i) The owner or operator of the stationary source shall provide written notice by direct mailing based on a mailing list of parents or guardians provided by the school, or

(ii) The administrator of the school, or an assignee of the administrator, shall distribute notices provided by the stationary source owner or operator to the parents or guardians. The cost of such distribution shall be paid by the owner or operator of the stationary source, or

(iii) An alternative method acceptable to the administrator of the school and the owner or operator of the stationary source provided the Air Pollution Control Officer finds that such method meets the intent of the notification requirements of this rule.

(12) The owner or operator of the stationary source shall prepare and distribute a public health risk assessment summary to those persons receiving notice pursuant to this rule requesting additional information within 30 days of such requests. Such requests shall be in writing or by appropriately marking and returning the "Public Reponse Survey Card" specified in Subsection (d)(6). The summary shall be approved in advance by the Air Pollution Control Officer and shall provide information on the health risk assessment in more detail than the initial public notification. The summary shall include information concerning stationary source operations, emissions, potential cancer and non-cancer public health impacts, and past, current and future stationary source risk reduction efforts.

(13) If, based on the public response from persons receiving notice pursuant to this rule within 30 days of public notification, the Air Pollution Control Officer determines, on a case-by-case basis, that a public meeting is required, the Air Pollution Control Officer shall so notify the owner or operator of the affected stationary source and the owner or operator shall hold a public meeting within 90 days after public notification. The meeting shall be held at a time and place that facilitates public attendance. Translators shall be present if five percent or more of the expected audience is non-English speaking. The Air Pollution Control Officer, or designee, shall attend each public meeting.

The owner or operator of a stationary source required to conduct a public meeting shall plan, provide notice of and conduct such meeting, and shall bear the costs, including District costs, of holding the meeting. Notice of the meeting shall be sent to all persons expressing interest in having a meeting, shall be provided at least 14 days prior to the meeting, and shall be in English and the primary language(s) spoken by each non-English speaking ethnic group representing five percent or more of the persons receiving notice of the meeting.

(14) The owner or operator of a stationary source required to provide public notification pursuant to Section (d) of this rule, and which stationary source's most recently approved public health risk assessment indicates potential public health risks above the significant risk mitigation levels specified in Section (e) of this rule, shall provide public notification, in accordance with the procedures of this rule, annually. The owner or operator may cease annual public notification upon demonstrating, to the satisfaction of the Air Pollution Control Officer, that potential public health risks have been reduced below the significant risk mitigation levels.

The owner or operator of a stationary source required to provide public notification pursuant to Section (d) of this rule, and which stationary source's most recently approved public health risk assessment indicates potential public health risks above the public notification levels specified in Subsection (d)(1)of this rule, shall provide public notification, in accordance with the procedures of this rule, biennially. The owner or operator may cease biennial public notification upon demonstrating, to the satisfaction of the Air Pollution Control Officer, that potential public health risks have been reduced below the public notification levels.

(15) A copy of all information provided by the owner or operator of a stationary source to the public pursuant to the notification requirements of this rule shall also be provided to the Air Pollution Control Officer.

(e) STATIONARY SOURCE TOXIC AIR CONTAMINANT RISK REDUCTION AUDITS AND PLANS

(1) Except as provided in Subsections (e)(2), (e)(3) and (e)(4), within six months of receipt of written notice from the Air Pollution Control Officer that a stationary source's most recent approved public health risk assessment indicates potential public health risks equal to or greater than one or more of the following significant risk mitigation levels, the owner or operator shall submit to the Air Pollution Control Officer, for review for completeness, a stationary source toxic air contaminant risk reduction audit and plan:

(i) Maximum incremental cancer risks equal to or greater than 100 in one million, or

(ii) Cancer burden equal to or greater than 1.0, or

(iii) Total acute noncancer health hazard index equal to or greater than 1.0, or

(iv) Total chronic noncancer health hazard index equal to or greater than 1.0.

The risk reduction audit and plan shall contain airborne toxic risk reduction measures proposed by the owner or operator which will be sufficient to reduce the stationary source emissions to levels that result in potential public health risks below the significant risk mitigation levels specified above. Such emission reductions shall be accomplished within five years of the date the plan is submitted to the Air Pollution Control Officer.

(2) A risk reduction audit and plan shall not be required for a total hazard index for acute or chronic health risks equal to or greater than 1.0 but less than 5.0 if the Air Pollution Control Officer determines, after consultation with the state Office of Environmental Health Hazard Assessment, that adverse public health effects are unlikely to occur at the levels of exposure estimated in the approved public health risk assessment.

(3) The Air Pollution Control Officer may shorten the period for a stationary source to reduce risks below the significant risk mitigation levels if the Air Pollution Control Officer finds that it is technically feasible and economically practicable for the stationary source to do so or if the Air Pollution Control Officer finds that the emissions from the stationary source pose an unreasonable health risk. In determining whether the period for risk reduction shall be shortened, the Air Pollution Control Officer shall consider:

(i) Whether it is technically feasible to reduce the estimated maximum incremental cancer risks for exposed persons to less than 250 in one million and total chronic and acute noncancer health hazard indexes to less than 10.0 in less than five years.

(ii) Whether, and to what extent, the annualized cost of the airborne toxic risk reduction measures necessary to meet the significant risk mitigation levels of Subsection (e)(1) is not more than 10 percent of the preceding five year average annual return on equity for the owner or operator, whichever has the higher average annual return on equity.

(iii) Whether the airborne toxic risk reduction measures which could be implemented in less than five years are based on technologies that have been proven in field applications, as determined by the Air Pollution Control Officer.

(iv) Whether there are alternative airborne toxic risk reduction measures available that are technically feasible and economically practicable and which can be implemented by the owner or operator sooner than the measures proposed by the owner or operator. If such alternative measures are available, the Air Pollution Control Officer may require that such measures be implemented prior to or in replacement of one or more of the measures proposed by the owner or operator.

(v) Whether there are additional stationary sources required to reduce public health risks pursuant to this Section (e) and for which there are approved health risk assessments indicating public health risks above the significant risk mitigation levels specified in Subsections (e)(1)(i), (ii), (iii) or (iv) for some or all of the same persons at risk by emissions from the stationary source under review.

(4) The Air Pollution Control Officer may lengthen the period for a stationary source owner or operator to reduce risks below the significant risk mitigation levels by up to an additional five years. To do so, the Air Pollution Control Officer must find that a period longer than five years will not result in an unreasonable risk to public health and that requiring implementation of the risk reduction audit and plan within five years would impose an unreasonable economic burden on the owner or operator, or is not technically feasible. In determining whether an owner or operator should be allowed more than five years to reduce risks below the significant risk mitigation levels, the Air Pollution Control Officer shall:

(i) Not allow more than five years to reduce the estimated maximum incremental cancer risks for exposed persons to less than 250 in one million and total chronic and acute noncancer health hazard indexes to less than 10.0.

(ii) Not require airborne toxic risk reduction measures to be implemented within five years, except as necessary to meet the requirements of Subsection (e)(4)(i), to the extent that the annualized cost of such measures exceeds 10 percent of the preceding five year average annual return on equity for the owner or operator, whichever has the higher average annual return on equity.

(iii) Not require airborne toxic risk reduction measures to be implemented within five years, except as necessary to meet the requirements of Subsection (e)(4)(i), to the extent those measures are based on technologies that have not yet been proven in field applications, as determined by the Air Pollution Control Officer.

(iv) Determine if alternative airborne toxic risk reduction measures are available that are technically feasible and economically practicable and which can be implemented by the owner or operator sooner than the measures proposed by the owner or operator. If such alternative measures are available, the Air Pollution Control Officer may require that such measures be implemented prior to or in replacement of one or more of the measures proposed by the owner or operator.

(v) Determine that the owner or operator will implement those airborne toxic risk reduction measures that are technically feasible and economically practicable as expeditiously as possible.

(vi) Consider whether there are additional stationary sources required to reduce public health risks pursuant to this Section (e) and for which there are approved health risk assessments indicating public health risks above the significant risk mitigation levels specified in Subsections (e)(1)(i), (ii), (iii) or (iv) for some or all of the same persons at risk by emissions from the stationary source under review.

The Air Pollution Control Officer shall not allow longer than five years if not specifically requested by the owner or operator. In making such a request, the owner or operator shall provide, in the manner and form prescribed by the Air Pollution Control Officer, all relevant information needed by the Air Pollution Control Officer to make the determinations specified above. The Air Pollution Control Officer may impose conditions on the approval of a period longer than five years as necessary to ensure that airborne toxic risk reduction measures that are technically feasible and economically practicable are implemented as expeditiously as possible.

(5) The risk reduction audit and plan submitted by the owner or operator shall contain all of the following:

(i) The name, location and standard industrial classification (SIC) code of the stationary source.

(ii) The identification of the emission units and toxic air contaminants emitted by each emission unit that contribute to potential public health risks above the significant risk mitigation levels specified in Subsection (e)(1). Emission units shall be listed by decreasing contribution to the total potential public health risks estimated for the stationary source. Toxic air contaminants shall be listed for each emission unit by decreasing contribution to the potential public health risk estimated for that unit.

The plan need not include identification of emission units which emit toxic air contaminants in amounts which the approved public health risk assessment indicates do not cause maximum incremental cancer risks greater than 1.0 in a million, nor a total acute noncancer health hazard index of 1.0 or greater, nor a total chronic noncancer health hazard index of 1.0 or greater. The plan shall include identification of all emission units for which the owner or operator proposes to reduce toxic air contaminant emissions as part of the risk reduction audit and plan.

(iii) A listing and an evaluation of all airborne toxic risk reduction measures available to the owner or operator and which could be used to reduce emissions from the emission units identified in Subsection (e)(5)(ii). The evaluation shall identify the emission units and toxic air contaminants affected by each measure and the extent of emission reductions that would be achieved for each emission unit and each affected contaminant.

(iv) The identification of and the rationale for the airborne toxic risk reduction measures proposed for implementation by the owner or operator. The plan shall also include the rationale for not proposing for implementation any of the airborne toxic risk reduction measures identified as available to the owner or operator, including those identified as infeasible or not economically reasonable.

(v) A schedule for implementing the proposed airborne toxic risk reduction measures within five years or within a shorter or longer period as determined by the Air Pollution Control Officer pursuant to Subsections (e)(3) or (e)(4) of this rule. The schedule shall include specific increments of progress towards implementing the airborne toxic risk reduction measures. The schedule shall include dates by which applications for any authorities to construct or modified permits to operate will be submitted to the Air Pollution Control Officer, by which each measure will be in place, and by which the actual in-use effectiveness of each measure will be demonstrated to the Air Pollution Control Officer.

(vi) A demonstration that the proposed airborne toxic risk reduction measures will be sufficient to reduce or eliminate toxic air contaminant emissions from the stationary source to levels sufficient to ensure that potential public health risks from such emissions are below the significant risk mitigation levels specified in Subsection (e)(1) of this rule. The demonstration shall be made through analogy with the approved public health risk assessment for the stationary source or by submission of a revised forecast risk assessment. The demonstration shall include any foreseeable new or increased emissions of toxic air contaminants from the stationary source and the estimated public health risks resulting from such new or increased emissions during the period approved for implementation of the risk reduction audit and plan.

(vii) A schedule for providing progress reports on reductions in emissions of toxic air contaminants and estimated public health risks achieved under the implemented plan. Progress reports shall be provided not less frequently than annually and may be incorporated into toxic air contaminant emission inventory report updates required pursuant to Section 44344 of the Health and Safety Code.

(viii) A certification by an engineer registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code, by an individual responsible for processes or operations of the affected stationary source, or by an environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code, that the audit and plan submitted meets the requirements of Section (e) of this rule and Part 6, Chapter 6 of Division 26 of the Health and Safety Code.

(6) Within 30 days of receipt of a risk reduction audit and plan submitted pursuant to this section, the Air Pollution Control Officer shall provide notice in a newspaper of general circulation, and direct notice to all individuals requesting such notice for the specific stationary source, of receipt of the plan, the availability of the plan for public inspection, and an opportunity to provide written comments regarding the plan within 30 days.

(7) Within 90 days after receipt of a risk reduction audit and plan submitted pursuant to this section, the Air Pollution Control Officer shall determine whether the plan is complete and so notify the owner or operator. A plan will be determined to be complete if it meets all of the requirements of this section. In determining whether a plan is complete, the Air Pollution Control Officer shall evaluate whether the airborne toxic risk reduction measures proposed are sufficient to achieve the emission reductions necessary to reduce potential public health risks below the significant risk mitigation levels specified in Subsection (e)(1) within five years or such other period approved by the Air Pollution Control Officer pursuant to Subsections (e)(3) and (e)(4).

(8) If the Air Pollution Control Officer finds that a risk reduction audit and plan is incomplete, the Air Pollution Control Officer shall remand the plan to the owner or operator for revision, specifying the deficiencies in the plan. Within 90 days of the date the remanded plan is received, the owner or operator shall submit a revised risk reduction audit and plan that corrects the deficiencies identified by the Air Pollution Control Officer.

Within 90 days of receipt of a revised plan, the Air Pollution Control Officer shall determine whether the revised plan is complete and so notify the owner or operator. If the Air Pollution Control Officer finds that the revised risk reduction audit and plan does not adequately correct the deficiencies identified and is not complete, the Air Pollution Control Officer shall so notify the owner or operator in writing and may remand the plan to the owner or operator for further revision or may disapprove the plan and find the owner or operator to be in violation of this rule.

(9) The owner or operator of a stationary source subject to the requirements of this section (e) shall commence implementation of the risk reduction audit and plan for the stationary source upon receipt of written notice from the Air Pollution Control Officer that the plan has been determined to be complete. The owner or operator shall fully implement the plan as determined complete by the Air Pollution Control Officer and in accordance with the schedule specified in the complete plan.

(10) Upon full implementation of each airborne toxic risk reduction measure identified in a risk reduction audit and plan determined to be complete by the Air Pollution Control Officer, the measure shall become enforceable by the Air Pollution Control Officer through inclusion of appropriate and necessary conditions on current permits to operate for the affected emission units. This Subsection (e)(10) shall not preclude an owner or operator from requesting, nor the Air Pollution Control Officer from granting, modifications to a permit to operate for an affected emission unit if the owner or operator demonstrates that the modifications will not interfere with the attainment of the risk reductions, and dates, contained in the complete risk reduction audit and plan.

(11) The Air Pollution Control Officer may require that a risk reduction audit and plan be revised and resubmitted if the Air Pollution Control Officer receives new information regarding toxic air contaminant emissions from the stationary source or alternative airborne toxic risk reduction measures that would significantly impact or reduce risks to exposed persons.

(f) All costs incurred by the Air Pollution Control Officer in carrying out the public notification and risk reduction audit and plan requirements of this rule in conjunction with an affected stationary source shall be paid by the owner or operator of that stationary source in accordance with Section (m) of Rule 40 of these Rules and Regulations.

Table I

Toxic Air Contaminants With Potential Carcinogenic Impacts[a]

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	p-Nitrosodiphenylamine
(as 2, 3, 7, 8 - equivalents)	N-Nitrosodi-n-butylamine
Chlorinated dibenzofurans	N-Nitrosomethylethlamine
(as 2, 3, 7, 8 - equivalents)	N-Nitrosodi-n-propylamine
Chloroform	N-Nitrosopyrrolidine
Chlorophenols	PCBs (Polychlorinated biphenyls)
Pentachlorophenol	PAHs (Polycyclic aromatic hydrocarbons)
2, 4, 6 - Trichlorophenol	including, but not limited to:
Chloroprene	Benz[a]anthracene
Chromium (hexavalent)	Benzo[b]fluoranthene
Coke oven emissions	Benzo[k]fluoranthene
1, 2 - Dibromo -3- chloropropane (DBCP)	Benzo[a]pyrene
p-Dichlorobenzene	Dibenz[a,h]anthracene
(1, 4 - Dichlorobenzene)	Indeno[1,2,3-cd]pyrene
3,3' - Dichlorobenzidene	Perchloroethylene (Tetrachlooethylene)
Di (2 -ethyhexyl) phthalate (DEHP)	Propylene oxide
1, 4 - Dioxane	Trichlorethylene
Dioxins (chlorinated)	Urethane
(see chlorinated dibenzo-p-dioxins)	Vinyl chloride
Epichlorohydrin	

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 With Potential Chronic Noncancer Impacts[a]

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
	Hydrazine
Chlorinated dibenzofurans {as 2, 3, 7, 8 - equivalents}	Hydrochloric acid
	Hydrogen cyanide
Chlorine	Hydrogen fluoride
Chlorobenzene (monochlorobenzene)	Hydrogen sulfide
Chlorofluorocarbons	Isocyanates
Chloroform	Toluene-2, 4-diisocyanate
Chlorophenols	Toluene-2, 6-diisocyanate
2-Chlorophenol	Methyl isocyanate
Pentachlorophenol	Lead and compounds
Tetrachlorophenols	Maleic anhydride
Chloropicrin	Manganese and compounds
Chloroprene	Mercury and compounds (inorganic)
Chromium (hexavalent)	Methanol
Copper	Methyl bromide
Cresols (o, m, p)	Methyl chloroform (1, 1, 1 - TCA)
Dibensodioxins (chlorinated)	Methylene chloride
(see chlorinated dibenzo-p-dioxins	4, 4' - Methylene dianiline (and its dichloride)
Dibenzodioxins (chlorinated)	Methyl mercury
(see chlorinated dibenzofurans)	methyl methacrylate
1, 2 - Dibromo-3-chloropropane (DBCP)	Mineral fibers (< 1% free silica)
p - Dichlorobenzene (1, 4 - Dichlorobenzene)	Naphthalene
1, 4- Dioxane	Nickel and nickel compounds
Di(2-ethylhexyl) phthalate	Nitrobenzene
Dimethylamine	2 - Nitropropane

Table II - continued

Toxic Air Contaminants With Potential Chronic Noncancer Impacts[a]

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

Table III

Toxic Air Contaminants With Potential Acute Noncancer Impacts[a]

Chemical	Chemical
Ammonia	Hydrogen fluoride
Acrolein	Hydrogen sulfide
Arsine	Maleic anhydride
Benyzl 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.

IT IS FURTHER RESOLVED AND ORDERED that the subject addition of Rule 1210, to Regulation XII, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this 12th day of June, 1996 by the following votes:

AYES: Cox, Jacob, Slater, Roberts, Horn

STATE OF CALIFORNIA)ss
County of San Diego)

I hereby certify that the foregoing is a full, true, and correct copy of the Original Resolution which is now on file in my office.

ARLINE S. HULTSCH
Assistant Clerk of the Air Pollution Control Board

By L. Monteleone
Lorena Loaiza Monteleone, Deputy

APPROVED AS TO FORM AND LEGALITY
COUNTY COUNSEL
BY Dutton
DEPUTY

BOARD OF SUPERVISORS
COUNTY OF SAN DIEGO
SAN DIEGO COUNTY, CALIFORNIA

Resolution No. 96-164
6/12/96 (APCB 2)

NEW ADDED RULE
CHANGE COPY

Re Rules and Regulations of the)
Air Pollution Control District)
of San Diego County . . . . .)

RESOLUTION ADDING RULE 1210 TO REGULATION XII OF THE RULES AND REGULATIONS OF THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

On motion of Member_____, seconded by Member _____ the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

New Rule 1210 amendments: Section (d) - Subsection (1), (3), (4) and (5) has been amended to read as follows:

RULE 1210. TOXIC AIR CONTAMINANT PUBLIC HEALTH RISKS - PUBLIC NOTIFICATION AND RISK REDUCTION

(a) APPLICABILITY

This rule is applicable to each stationary source required to prepare a public health risk assessment pursuant to Section 44360 of the Health and Safety Code.

(b) EXEMPTIONS

The provisions of Sections (d) and (e) of this rule shall not apply to stationary sources for which industry-wide generic public health risk assessments are prepared by the Air Pollution Control Officer pursuant to Section 44323 of the Health and Safety Code.

(c) DEFINITIONS

(1) **"Airborne Toxic Risk Reduction Measure"** means changes at a stationary source that reduce or eliminate toxic air contaminant emissions subject to this rule.

Airborne toxic risk reduction measures may include changes in production processes, feed stock modifications, product reformulations, production system modifications, system enclosures, emissions capture, emissions control, emissions conversion, or modifications to operational standards or practices. Airborne toxic risk reduction measures do not include measures which will result in an increased health risk to the public from exposures to the toxic chemical in another media, nor which will result in an increased health risk to stationary source workers or the consumer.

(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.

(3) "**Contiguous Property**" means the same as defined in Rule 2 of these Rules and Regulations.

(4) **"Emission Inventory Report"** means a document that identifies and describes sources of toxic air contaminant emissions at a stationary source, characterizes the nature of the discharge of such contaminants, and estimates the types and amounts of toxic air contaminants emitted from each source.

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

(6) "**Individual Substance Acute Health Hazard Index**" means, for each air contaminant, the ratio of the maximum estimated concentration of that contaminant in the ambient air for the specified averaging time for a given potential acute health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(7) "**Individual Substance Chronic Health Hazard Index**" means, for each air contaminant, the ratio of the maximum estimated concentration of that contaminant in the ambient air for the specified averaging time for a given potential chronic health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(8) **"Industry-Wide Generic Public Health Risk Assessment"** means a study to identify, characterize and quantify the potential public health risks that may result from emissions of toxic air contaminants from a class of stationary sources which the Air Pollution Control Officer finds meets all of the following:

(i) All stationary sources within the class fall within one four-digit Standard Industrial Classification Code.

(ii) Individual preparation of emission inventory reports and public health risk assessments would impose severe economic hardships on the majority of stationary sources within the class.

(iii) The majority of the class is composed of small businesses.

(iv) Releases of toxic air contaminants from individual stationary sources in the class can easily and generically be characterized and calculated.

(9) **"Maximum Incremental Cancer Risk"** means the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants emitted from a stationary source.

(10) "**Prioritization Score**" means a value indicative of a stationary source's toxic air contaminant emissions strength, arrived at by use of emissions data contained in an approved emission inventory report, air contaminant toxicity data recommended by the state Office of Environmental Health Hazard Assessment, and a calculation methodology established by the Air Pollution Control Officer. Separate prioritization scores are determined for toxic air contaminants with the potential for causing carcinogenic effects, noncarcinogenic acute effects, and noncarcinogenic chronic effects.

(11) **"Public Health Risk Assessment"** means a study to identify, characterize and quantify the estimated potential cancer and noncancer public health risks that may result from public exposure to emissions of toxic air contaminants emitted from one or more emission units at a stationary source.

(12) **"Risk Reduction Audit and Plan"** means a study prepared by the owner or operator of a stationary source which identifies sources and emissions of toxic air contaminants at the stationary source that result in potentially significant public health risks and which proposes airborne toxic risk reduction measures that are sufficient to reduce potential public health risks from such emissions to less than significant risk mitigation levels as specified in this rule.

(13) "**School**" means any public or private school used for the education of more than 12 children in one or more grades from kindergarten through grade 12, but does not include any school in which education is primarily conducted in a private home.

(14) "**Small Business**" means the same as defined in Government Code Section 11342(e).

(15) **"Stationary Source"** means the same as defined in Rule 2 of these Rules and Regulations.

(16) **"Total Acute Noncancer Health Hazard Index"** means the estimated potential risk of acute public health effects and is the sum of the individual substance acute health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants emitted from a stationary source and identified in Table III.

(17) "**Total Chronic Noncancer Health Hazard Index**" means the estimated potential risk of chronic public health effects and is the sum of the individual substance chronic health hazard indexes affecting the same target organ system for a potential maximally exposed individual for all toxic air contaminants emitted from a stationary source and identified in Table II.

(18) **"Toxic Air Contaminant"** means the air contaminants listed in Table I (carcinogenic), Table II (noncarcinogenic-chronic) or Table III (noncarcinogenic-acute), which have a health standard approved by the state Office of Environmental Health Hazard Assessment (OEHHA) and are 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 replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October, 1993.

The Air Pollution Control Officer may revise Tables I, II or III upon OEHHA adoption of revised CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines or upon OEHHA adoption of any health risk assessment guidelines or revisions pursuant to

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

(d) PUBLIC HEALTH RISK NOTIFICATION REQUIREMENTS

(1) Except as provided in Subsections (d)(2) and (d)(3), the owner or operator of each stationary source for which a public health risk assessment has been approved by the Air Pollution Control Officer and which risk assessment indicates potential public health risks at or above the levels specified in Subsections (d)(1) (i), (ii), (iii) or (iv) shall provide written public notice of such risks. Public notice shall be by direct mailing, to each resident, business, parent or guardian of each student, and administrators of each school, hospital, day care center, convalescent home and any other sensitive receptor potentially exposed to such risks as specified by the Air Pollution Control Officer. Unless the health risk assessment for a stationary source is based on the estimated toxic air contaminant emissions at the source during calendar year 1989, the Air Pollution Control Officer will notify the owner or operator within 15 days after District approval of a health risk assessment whether public notice of such risks is required. If the approved public health risk assessment indicates potential public health risks at or above the levels specified in Subsections (e)(1) or (e)(2), as applicable, the Air Pollution Control Officer will indicate in the notification to the owner or operator that the owner or operator must also comply with Section (e) of this rule.

(i) Maximum incremental cancer risks equal to or greater than 10 in one million, or

(ii) Cancer burden equal to or greater than 1.0, or

(iii) Total acute noncancer health hazard index equal to or greater than 1.0, or

(iv) Total chronic noncancer health hazard index equal to or greater than 1.0.

Upon receipt of written notice from the Air Pollution Control Officer that the approved public health risk assessment indicates potential public health risks equal to or greater than the above levels, the owner or operator shall provide written public notice in accordance with the provisions of Subsections (d)(5) through (d)(15) of this rule.

(2) Written public notice shall not be required for a total acute or chronic noncancer health hazard index equal to or greater than 1.0 but less than 5.0 if the Air Pollution Control Officer determines, after consultation with the state Office of Environmental Health Hazard Assessment, that adverse public health effects are unlikely to occur at the levels of exposure estimated in the approved public health risk assessment.

(3) If the approved public health risk assessment for a stationary source is based on estimated toxic air contaminant emissions at the source during calendar year 1989, the written public notice required by Subsection (d)(1) shall be based on the 1989 emissions-based approved risk assessment unless the owner or operator of the stationary source has ~~submitted an updated risk assessment which has been approved by the Air Pollution Control Officer prior to when the Air Pollution Control Officer gives notice pursuant to Subsection (d)(1) that public notice is required, or has~~:

(i) Submitted an updated emission inventory report which has been approved by the Air Pollution Control Officer by (*date of rule adoption*), and

(ii) Demonstrated, by (*45 days after rule adoption*), to the satisfaction of the Air Pollution Control Officer that potential public health risks are likely to have dropped:

(A) f From equal to or greater than to below any of the public notification levels specified in Subsection (d)(1) or (d)(2), or

(B) f From equal to or greater than to below any of the significant risk mitigation levels specified in Subsection (e)(1) or (e)(2), or

(C) By at least 80% from any of the overall facility cancer or non-cancer risk levels in the approved health risk assessment based on toxic air contaminant emissions during calendar year 1989, and

(iii) Demonstrated, by (*45 days after rule adoption*), to the satisfaction of the Air Pollution Control Officer that the decreases in indicated public health risks are the result of: permanent, quantifiable and enforceable changes in estimated emissions; changes in emission factors or methods of estimating emissions or toxic air contaminant exposure levels approved by the Air Pollution Control Officer; or, changes in toxicity, cancer potency, acceptable public exposure levels, or methods for estimating public exposures recommended by the state Office of Environmental Health Hazard Assessment, and

(iv) Prepared and submitted an updated public health risk assessment in accordance with the following schedule:

(A) Within 45 days after receipt of a final determination from the Air Pollution Control Officer that the stationary source is eligible to base the public notification required by Subsection (d)(1) on an updated public health risk assessment, submit for approval by the Air Pollution Control Officer a protocol describing the manner by which the updated public health risk assessment will be conducted.

(B) Within 90 days of approval of the protocol, submit an updated public health risk assessment to the Air Pollution Control Officer for approval. The updated health risk assessment shall be prepared following the approved protocol.

(C) Within 30 days of written notice from the Air Pollution Control Officer identifying any deficiencies in the updated public health risk assessment, revise and resubmit for approval a corrected risk assessment that addresses those deficiencies.

If an updated public health risk assessment has been prepared and approved pursuant to this Subsection (d)(3), the written public notice required by Subsection (d)(1) shall be given based upon the results of the updated health risk assessment and in accordance with the provisions of Subsections (d)(5) through (d)(15) of this rule. Public notice shall be given upon receipt of written notice from the Air Pollution Control Officer that the updated risk assessment has been approved and that the results indicate potential public health risks above the levels specified in Subsection (d)(1)(i), (ii), (iii), or (iv) or (d)(2) or (e)(1) or (e)(2), if applicable. In the event an updated health risk assessment is disapproved, or the owner or operator fails to comply with the schedule for updating a

risk assessment specified in this Subsection (d)(3), the Air Pollution Control Officer shall require the owner or operator to provide public notice and, if applicable, comply with the provisions of Section (e) based on the most recent approved public health risk assessment for the stationary source.

(4) In implementing the provisions of Subsection (d)(3), the Air Pollution Control Officer shall:

(i) By (*15 days after rule adoption*), make a preliminary determination of each affected stationary source's eligibility to update its public health risk assessment and provide written notice of the preliminary determination to each affected stationary source. The preliminary determination shall be based on the most recent approved emission inventory report for the stationary source, updated stationary source prioritization scores, stationary source permit information, and stationary source supplied information, and

(ii) Provide the public and the owner or operator of each affected stationary source 30 days to submit written comments on the preliminary determination and to submit any relevant additional information, and

Provide notice of the preliminary determinations in a newspaper of general circulation. Such notice shall contain the name and location of each affected stationary source, and the preliminary determination made for each source. The notice shall state that the materials on which the Air Pollution Control Officer based the determinations are available for review at the District, and that the District in making a final determination of each source's eligibility to update its risk assessment will consider all written comments and any relevant additional information submitted within the 30-day comment period described above. The notice shall also state that written public notice may be required to be given to fewer persons under a revised risk assessment than under the 1989 emissions-based public health risk assessment, and that the 1989 emissions-based public health risk assessments are available for review at the District. The notice shall also state the schedule for the District to receive any updated risk assessments, and that the updated risk assessments will be available for review at the District, and

(iii) By (*~~60~~ 75 days after rule adoption*), make a final determination of each affected stationary source's eligibility to update its public health risk assessment and provide written notice of the final determination to each affected stationary source, and

(iv) Within 30 days of receipt of a risk assessment protocol submitted pursuant to Subsection (d)(3)(iv)(A), approve or revise and approve the protocol and provide written notice of the approval to the owner or operator of the affected stationary source, and

(v) Provide notice of receipt of an updated risk assessment to any person who requests such notice, and ~~W~~ within 60 days of receipt of an updated public health risk assessment submitted pursuant to Subsections (d)(3)(iv)(B) or (d)(3)(iv)(C), approve, revise and approve, or disapprove the risk assessment and provide written notice of the approval or disapproval to the owner or operator and notice of whether the results of the most recently approved public health risk assessment indicate potential public health risks above the levels specified in Subsection (d)(1).

(5) Within 45 days of the date of written notice from the Air Pollution Control Officer that public notification is required pursuant to Subsections (d)(1) or (d)(3) of this rule, the owner or operator of a stationary source shall prepare and submit to the Air

Pollution Control Officer, for approval, a public notification plan. The plan shall include all of the following:

(i) A proposed public notification letter to be signed by the Air Pollution Control Officer. The proposed notification letter shall be identical in form and text to the model notification letter provided by the Air Pollution Control Officer and shall include the additional stationary source-specific information required by the model notification letter. If notification is based on an updated risk assessment pursuant to Subsection (d)(3), the letter shall state that the 1989 emissions-based risk assessment is available at the District for review by interested members of the public.

(ii) Any proposed optional stationary source informational letter to accompany the public notification letter.

(iii) The name and phone number of the person responsible for coordinating public notification for the stationary source.

(iv) A description of the proposed methodology, such as the use of a mailing service, for obtaining the addresses of residents and persons to be notified and for carrying out the notification process.

(v) A list of all zip codes or census tracts to be included in the notification, and the estimated total number of notification letters to be mailed.

(vi) A list of all schools, hospitals, day care centers, convalescent homes and other sensitive receptors to be notified.

(vii) A list of the primary languages spoken by non-English speaking persons in the area to receive notification where such language is the primary language of five percent or more of the total persons to be notified in any census tract in the area to receive notification.

(viii) A proposed method for responding to public comments and requests.

The Air Pollution Control Officer shall approve, or revise and approve, the public notification plan within 30 days of receipt of the plan.

(6) The owner or operator of a stationary source required to provide written public notice pursuant to this rule shall implement the stationary source public notification plan, as approved by the Air Pollution Control Officer, within 30 days of the date of written notice from the Air Pollution Control Officer of such approval. Each written public notice shall be mailed via the U.S. Postal Service and shall contain only:

(i) The approved public notification letter signed by the Air Pollution Control Officer.

(ii) An "Air Toxics Hot Spots Fact Sheet" and a "Public Response Survey Card" reproduced from originals provided by the Air Pollution Control Officer.

(iii) Any stationary source informational letter that has been approved by the Air Pollution Control Officer.

(iv) For each public notification directed to a business, a request that the business post or circulate the District public notification letter for review by all on-site employees of the business.

(v) At the option of the owner or operator of the stationary source, a notice to carry out the warning requirements of Section 25249.6 of the Health and Safety Code provided such notice has been determined by the Air Pollution Control Officer not to conflict with the intent or content of the public notifications required by this rule.

(7) Multilingual notifications shall be provided by the owner or operator of a stationary source required to provide public notification pursuant to this rule if five percent or more of the recipients within any census tract in the area to receive notification are non-English speaking. In such case, the notifications shall be provided in those languages which are the primary language of five percent or more of the total persons to be notified in that census tract.

(8) Any stationary source informational letter to be included in the notification required by this rule shall be approved by the Air Pollution Control Officer and shall enhance and not undermine the public health risk notification process. The stationary source informational letter may include:

(i) A discussion of air contaminants emitted, emission rates, and the reasons why the emissions occur.

(ii) A discussion of steps taken, or future steps planned, by the stationary source to reduce emissions or risks to the public. The owner or operator shall document to the Air Pollution Control Officer any such steps taken and/or provide a written commitment to the Air Pollution Control Officer for any steps planned.

(iii) A brief and factual discussion of the risk assessment results and the uncertainties and conservatism of the risk assessment.

(iv) The name, address and phone number of a stationary source contact regarding the public notification and the risk assessment.

(9) Each public notification shall be mailed in an envelope supplied by the Air Pollution Control Officer. The envelope shall be marked with the name and address of the Air Pollution Control District and the words "Public Health Information" if mailed to areas where the approved health risk assessment indicates potential risks below the significant risk mitigation levels specified in Section (e) of this rule. The envelope shall be marked with the words "Public Health Notice" if mailed to areas where the approved health risk assessment indicates potential risks at or above the significant risk mitigation levels.

(10) If the owner or operator of a stationary source fails to carry out the public notification requirements of this rule, the Air Pollution Control Officer shall carry out such notification at the earliest possible date. All District costs of such notification shall be paid by the owner or operator of the stationary source.

(11) The parents or legal guardians of students attending schools with potential exposure to risks above the notification levels specified in Subsection (d)(1) shall be notified by one of the following methods as determined by the administrator of the affected school:

(i) The owner or operator of the stationary source shall provide written notice by direct mailing based on a mailing list of parents or guardians provided by the school, or

(ii) The administrator of the school, or an assignee of the administrator, shall distribute notices provided by the stationary source owner or operator to the parents or guardians. The cost of such distribution shall be paid by the owner or operator of the stationary source, or

(iii) An alternative method acceptable to the administrator of the school and the owner or operator of the stationary source provided the Air Pollution Control Officer finds that such method meets the intent of the notification requirements of this rule.

(12) The owner or operator of the stationary source shall prepare and distribute a public health risk assessment summary to those persons receiving notice pursuant to this rule requesting additional information within 30 days of such requests. Such requests shall be in writing or by appropriately marking and returning the "Public Reponse Survey Card" specified in Subsection (d)(6). The summary shall be approved in advance by the Air Pollution Control Officer and shall provide information on the health risk assessment in more detail than the initial public notification. The summary shall include information concerning stationary source operations, emissions, potential cancer and non-cancer public health impacts, and past, current and future stationary source risk reduction efforts.

(13) If, based on the public response from persons receiving notice pursuant to this rule within 30 days of public notification, the Air Pollution Control Officer determines, on a case-by-case basis, that a public meeting is required, the Air Pollution Control Officer shall so notify the owner or operator of the affected stationary source and the owner or operator shall hold a public meeting within 90 days after public notification. The meeting shall be held at a time and place that facilitates public attendance. Translators shall be present if five percent or more of the expected audience is non-English speaking. The Air Pollution Control Officer, or designee, shall attend each public meeting.

The owner or operator of a stationary source required to conduct a public meeting shall plan, provide notice of and conduct such meeting, and shall bear the costs, including District costs, of holding the meeting. Notice of the meeting shall be sent to all persons expressing interest in having a meeting, shall be provided at least 14 days prior to the meeting, and shall be in English and the primary language(s) spoken by each non-English speaking ethnic group representing five percent or more of the persons receiving notice of the meeting.

(14) The owner or operator of a stationary source required to provide public notification pursuant to Section (d) of this rule, and which stationary source's most recently approved public health risk assessment indicates potential public health risks above the significant risk mitigation levels specified in Section (e) of this rule, shall provide public notification, in accordance with the procedures of this rule, annually. The owner or operator may cease annual public notification upon demonstrating, to the satisfaction of the Air Pollution Control Officer, that potential public health risks have been reduced below the significant risk mitigation levels.

The owner or operator of a stationary source required to provide public notification pursuant to Section (d) of this rule, and which stationary source's most recently approved public health risk assessment indicates potential public health risks above the public notification levels specified in Subsection (d)(1)of this rule, shall provide public notification, in accordance with the procedures of this rule, biennially. The owner or

operator may cease biennial public notification upon demonstrating, to the satisfaction of the Air Pollution Control Officer, that potential public health risks have been reduced below the public notification levels.

(15) A copy of all information provided by the owner or operator of a stationary source to the public pursuant to the notification requirements of this rule shall also be provided to the Air Pollution Control Officer.

(e) STATIONARY SOURCE TOXIC AIR CONTAMINANT RISK REDUCTION AUDITS AND PLANS

(1) Except as provided in Subsections (e)(2), (e)(3) and (e)(4), within six months of receipt of written notice from the Air Pollution Control Officer that a stationary source's most recent approved public health risk assessment indicates potential public health risks equal to or greater than one or more of the following significant risk mitigation levels, the owner or operator shall submit to the Air Pollution Control Officer, for review for completeness, a stationary source toxic air contaminant risk reduction audit and plan:

(i) Maximum incremental cancer risks equal to or greater than 100 in one million, or

(ii) Cancer burden equal to or greater than 1.0, or

(iii) Total acute noncancer health hazard index equal to or greater than 1.0, or

(iv) Total chronic noncancer health hazard index equal to or greater than 1.0.

The risk reduction audit and plan shall contain airborne toxic risk reduction measures proposed by the owner or operator which will be sufficient to reduce the stationary source emissions to levels that result in potential public health risks below the significant risk mitigation levels specified above. Such emission reductions shall be accomplished within five years of the date the plan is submitted to the Air Pollution Control Officer.

(2) A risk reduction audit and plan shall not be required for a total hazard index for acute or chronic health risks equal to or greater than 1.0 but less than 5.0 if the Air Pollution Control Officer determines, after consultation with the state Office of Environmental Health Hazard Assessment, that adverse public health effects are unlikely to occur at the levels of exposure estimated in the approved public health risk assessment.

(3) The Air Pollution Control Officer may shorten the period for a stationary source to reduce risks below the significant risk mitigation levels if the Air Pollution Control Officer finds that it is technically feasible and economically practicable for the stationary source to do so or if the Air Pollution Control Officer finds that the emissions from the stationary source pose an unreasonable health risk. In determining whether the period for risk reduction shall be shortened, the Air Pollution Control Officer shall consider:

(i) Whether it is technically feasible to reduce the estimated maximum incremental cancer risks for exposed persons to less than 250 in one million and total chronic and acute noncancer health hazard indexes to less than 10.0 in less than five years.

(ii) Whether, and to what extent, the annualized cost of the airborne toxic risk reduction measures necessary to meet the significant risk mitigation levels of

Subsection (e)(1) is not more than 10 percent of the preceding five year average annual return on equity for the owner or operator, whichever has the higher average annual return on equity.

(iii) Whether the airborne toxic risk reduction measures which could be implemented in less than five years are based on technologies that have been proven in field applications, as determined by the Air Pollution Control Officer.

(iv) Whether there are alternative airborne toxic risk reduction measures available that are technically feasible and economically practicable and which can be implemented by the owner or operator sooner than the measures proposed by the owner or operator. If such alternative measures are available, the Air Pollution Control Officer may require that such measures be implemented prior to or in replacement of one or more of the measures proposed by the owner or operator.

(v) Whether there are additional stationary sources required to reduce public health risks pursuant to this Section (e) and for which there are approved health risk assessments indicating public health risks above the significant risk mitigation levels specified in Subsections (e)(1)(i), (ii), (iii) or (iv) for some or all of the same persons at risk by emissions from the stationary source under review.

(4) The Air Pollution Control Officer may lengthen the period for a stationary source owner or operator to reduce risks below the significant risk mitigation levels by up to an additional five years. To do so, the Air Pollution Control Officer must find that a period longer than five years will not result in an unreasonable risk to public health and that requiring implementation of the risk reduction audit and plan within five years would impose an unreasonable economic burden on the owner or operator, or is not technically feasible. In determining whether an owner or operator should be allowed more than five years to reduce risks below the significant risk mitigation levels, the Air Pollution Control Officer shall:

(i) Not allow more than five years to reduce the estimated maximum incremental cancer risks for exposed persons to less than 250 in one million and total chronic and acute noncancer health hazard indexes to less than 10.0.

(ii) Not require airborne toxic risk reduction measures to be implemented within five years, except as necessary to meet the requirements of Subsection (e)(4)(i), to the extent that the annualized cost of such measures exceeds 10 percent of the preceding five year average annual return on equity for the owner or operator, whichever has the higher average annual return on equity.

(iii) Not require airborne toxic risk reduction measures to be implemented within five years, except as necessary to meet the requirements of Subsection (e)(4)(i), to the extent those measures are based on technologies that have not yet been proven in field applications, as determined by the Air Pollution Control Officer.

(iv) Determine if alternative airborne toxic risk reduction measures are available that are technically feasible and economically practicable and which can be implemented by the owner or operator sooner than the measures proposed by the owner or operator. If such alternative measures are available, the Air Pollution Control Officer may require that such measures be implemented prior to or in replacement of one or more of the measures proposed by the owner or operator.

(v) Determine that the owner or operator will implement those airborne toxic risk reduction measures that are technically feasible and economically practicable as expeditiously as possible.

(vi) Consider whether there are additional stationary sources required to reduce public health risks pursuant to this Section (e) and for which there are approved health risk assessments indicating public health risks above the significant risk mitigation levels specified in Subsections (e)(1)(i), (ii), (iii) or (iv) for some or all of the same persons at risk by emissions from the stationary source under review.

The Air Pollution Control Officer shall not allow longer than five years if not specifically requested by the owner or operator. In making such a request, the owner or operator shall provide, in the manner and form prescribed by the Air Pollution Control Officer, all relevant information needed by the Air Pollution Control Officer to make the determinations specified above. The Air Pollution Control Officer may impose conditions on the approval of a period longer than five years as necessary to ensure that airborne toxic risk reduction measures that are technically feasible and economically practicable are implemented as expeditiously as possible.

(5) The risk reduction audit and plan submitted by the owner or operator shall contain all of the following:

(i) The name, location and standard industrial classification (SIC) code of the stationary source.

(ii) The identification of the emission units and toxic air contaminants emitted by each emission unit that contribute to potential public health risks above the significant risk mitigation levels specified in Subsection (e)(1). Emission units shall be listed by decreasing contribution to the total potential public health risks estimated for the stationary source. Toxic air contaminants shall be listed for each emission unit by decreasing contribution to the potential public health risk estimated for that unit.

The plan need not include identification of emission units which emit toxic air contaminants in amounts which the approved public health risk assessment indicates do not cause maximum incremental cancer risks greater than 1.0 in a million, nor a total acute noncancer health hazard index of 1.0 or greater, nor a total chronic noncancer health hazard index of 1.0 or greater. The plan shall include identification of all emission units for which the owner or operator proposes to reduce toxic air contaminant emissions as part of the risk reduction audit and plan.

(iii) A listing and an evaluation of all airborne toxic risk reduction measures available to the owner or operator and which could be used to reduce emissions from the emission units identified in Subsection (e)(5)(ii). The evaluation shall identify the emission units and toxic air contaminants affected by each measure and the extent of emission reductions that would be achieved for each emission unit and each affected contaminant.

(iv) The identification of and the rationale for the airborne toxic risk reduction measures proposed for implementation by the owner or operator. The plan shall also include the rationale for not proposing for implementation any of the airborne toxic risk reduction measures identified as available to the owner or operator, including those identified as infeasible or not economically reasonable.

(v) A schedule for implementing the proposed airborne toxic risk reduction measures within five years or within a shorter or longer period as determined by the Air Pollution Control Officer pursuant to Subsections (e)(3) or (e)(4) of this rule. The schedule shall include specific increments of progress towards implementing the airborne toxic risk reduction measures. The schedule shall include dates by which applications for any authorities to construct or modified permits to operate will be submitted to the Air Pollution Control Officer, by which each measure will be in place, and by which the actual in-use effectiveness of each measure will be demonstrated to the Air Pollution Control Officer.

(vi) A demonstration that the proposed airborne toxic risk reduction measures will be sufficient to reduce or eliminate toxic air contaminant emissions from the stationary source to levels sufficient to ensure that potential public health risks from such emissions are below the significant risk mitigation levels specified in Subsection (e)(1) of this rule. The demonstration shall be made through analogy with the approved public health risk assessment for the stationary source or by submission of a revised forecast risk assessment. The demonstration shall include any foreseeable new or increased emissions of toxic air contaminants from the stationary source and the estimated public health risks resulting from such new or increased emissions during the period approved for implementation of the risk reduction audit and plan.

(vii) A schedule for providing progress reports on reductions in emissions of toxic air contaminants and estimated public health risks achieved under the implemented plan. Progress reports shall be provided not less frequently than annually and may be incorporated into toxic air contaminant emission inventory report updates required pursuant to Section 44344 of the Health and Safety Code.

(viii) A certification by an engineer registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code, by an individual responsible for processes or operations of the affected stationary source, or by an environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code, that the audit and plan submitted meets the requirements of Section (e) of this rule and Part 6, Chapter 6 of Division 26 of the Health and Safety Code.

(6) Within 30 days of receipt of a risk reduction audit and plan submitted pursuant to this section, the Air Pollution Control Officer shall provide notice in a newspaper of general circulation, and direct notice to all individuals requesting such notice for the specific stationary source, of receipt of the plan, the availability of the plan for public inspection, and an opportunity to provide written comments regarding the plan within 30 days.

(7) Within 90 days after receipt of a risk reduction audit and plan submitted pursuant to this section, the Air Pollution Control Officer shall determine whether the plan is complete and so notify the owner or operator. A plan will be determined to be complete if it meets all of the requirements of this section. In determining whether a plan is complete, the Air Pollution Control Officer shall evaluate whether the airborne toxic risk reduction measures proposed are sufficient to achieve the emission reductions necessary to reduce potential public health risks below the significant risk mitigation levels specified in Subsection (e)(1) within five years or such other period approved by the Air Pollution Control Officer pursuant to Subsections (e)(3) and (e)(4).

(8) If the Air Pollution Control Officer finds that a risk reduction audit and plan is incomplete, the Air Pollution Control Officer shall remand the plan to the owner or operator for revision, specifying the deficiencies in the plan. Within 90 days of the date

the remanded plan is received, the owner or operator shall submit a revised risk reduction audit and plan that corrects the deficiencies identified by the Air Pollution Control Officer.

Within 90 days of receipt of a revised plan, the Air Pollution Control Officer shall determine whether the revised plan is complete and so notify the owner or operator. If the Air Pollution Control Officer finds that the revised risk reduction audit and plan does not adequately correct the deficiencies identified and is not complete, the Air Pollution Control Officer shall so notify the owner or operator in writing and may remand the plan to the owner or operator for further revision or may disapprove the plan and find the owner or operator to be in violation of this rule.

(9) The owner or operator of a stationary source subject to the requirements of this section (e) shall commence implementation of the risk reduction audit and plan for the stationary source upon receipt of written notice from the Air Pollution Control Officer that the plan has been determined to be complete. The owner or operator shall fully implement the plan as determined complete by the Air Pollution Control Officer and in accordance with the schedule specified in the complete plan.

(10) Upon full implementation of each airborne toxic risk reduction measure identified in a risk reduction audit and plan determined to be complete by the Air Pollution Control Officer, the measure shall become enforceable by the Air Pollution Control Officer through inclusion of appropriate and necessary conditions on current permits to operate for the affected emission units. This Subsection (e)(10) shall not preclude an owner or operator from requesting, nor the Air Pollution Control Officer from granting, modifications to a permit to operate for an affected emission unit if the owner or operator demonstrates that the modifications will not interfere with the attainment of the risk reductions, and dates, contained in the complete risk reduction audit and plan.

(11) The Air Pollution Control Officer may require that a risk reduction audit and plan be revised and resubmitted if the Air Pollution Control Officer receives new information regarding toxic air contaminant emissions from the stationary source or alternative airborne toxic risk reduction measures that would significantly impact or reduce risks to exposed persons.

(f) All costs incurred by the Air Pollution Control Officer in carrying out the public notification and risk reduction audit and plan requirements of this rule in conjunction with an affected stationary source shall be paid by the owner or operator of that stationary source in accordance with Section (m) of Rule 40 of these Rules and Regulations.

Table I

Toxic Air Contaminants With Potential Carcinogenic Impacts[a]

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	p-Nitrosodiphenylamine
(as 2, 3, 7, 8 - equivalents)	N-Nitrosodi-n-butylamine
Chlorinated dibenzofurans	N-Nitrosomethylethlamine
(as 2, 3, 7, 8 - equivalents)	N-Nitrosodi-n-propylamine
Chloroform	N-Nitrosopyrrolidine
Chlorophenols	PCBs (Polychlorinated biphenyls)
Pentachlorophenol	PAHs (Polycyclic aromatic hydrocarbons)
2, 4, 6 - Trichlorophenol	including, but not limited to:
Chloroprene	Benz[a]anthracene
Chromium (hexavalent)	Benzo[b]fluoranthene
Coke oven emissions	Benzo[k]fluoranthene
1, 2 - Dibromo -3- chloropropane (DBCP)	Benzo[a]pyrene
p-Dichlorobenzene	Dibenz[a,h]anthracene
(1, 4 - Dichlorobenzene)	Indeno[1,2,3-cd]pyrene
3,3' - Dichlorobenzidene	Perchloroethylene (Tetrachlooethylene)
Di (2 -ethyhexyl) phthalate (DEHP)	Propylene oxide
1, 4 - Dioxane	Trichlorethylene
Dioxins (chlorinated)	Urethane
(see chlorinated dibenzo-p-dioxins)	Vinyl chloride
Epichlorohydrin	

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 With Potential Chronic Noncancer Impacts[a]

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
	Hydrazine
Chlorinated dibenzofurans {as 2, 3, 7, 8 - equivalents}	Hydrochloric acid
	Hydrogen cyanide
Chlorine	Hydrogen fluoride
Chlorobenzene (monochlorobenzene)	Hydrogen sulfide
Chlorofluorocarbons	Isocyanates
Chloroform	Toluene-2, 4-diisocyanate
Chlorophenols	Toluene-2, 6-diisocyanate
2-Chlorophenol	Methyl isocyanate
Pentachlorophenol	Lead and compounds
Tetrachlorophenols	Maleic anhydride
Chloropicrin	Manganese and compounds
Chloroprene	Mercury and compounds (inorganic)
Chromium (hexavalent)	Methanol
Copper	Methyl bromide
Cresols (o, m, p)	Methyl chloroform (1, 1, 1 - TCA)
Dibensodioxins (chlorinated)	Methylene chloride
(see chlorinated dibenzo-p-dioxins	4, 4' - Methylene dianiline (and its dichloride)
Dibenzodioxins (chlorinated)	Methyl mercury
(see chlorinated dibenzofurans)	methyl methacrylate
1, 2 - Dibromo-3-chloropropane (DBCP)	Mineral fibers (< 1% free silica)
p - Dichlorobenzene (1, 4 - Dichlorobenzene)	Naphthalene
1, 4- Dioxane	Nickel and nickel compounds
Di(2-ethylhexyl) phthalate	Nitrobenzene
Dimethylamine	2 - Nitropropane

Table II - continued

Toxic Air Contaminants With Potential Chronic Noncancer Impacts[a]

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

Table III

Toxic Air Contaminants With Potential Acute Noncancer Impacts[a]

Chemical	Chemical
Ammonia	Hydrogen fluoride
Acrolein	Hydrogen sulfide
Arsine	Maleic anhydride
Benyzl 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.

IT IS FURTHER RESOLVED AND ORDERED that the subject addition of Rule 1210, to Regulation XII, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this_____ day of _____, 1996 by the following votes:

AYES:

NOES:

ABSENT:

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

AIR TOXICS "HOT SPOTS" INFORMATION AND ASSESSMENT ACT PUBLIC NOTIFICATION REQUIREMENTS AND PROCEDURES

WORKSHOP REPORT

The San Diego County Air Pollution Control District (the District) conducted a public workshop on November 21, 1995 to receive comments regarding Air Toxics "Hot Spots" Information And Assessment Act Public Notification Requirements and Procedures.

At the workshop, the District noted that the term "significant risk level for public notification" used in the draft procedures would be changed to "public notification level" in order to eliminate any confusion with the significant risk level to be used to require risk reduction.

Approximately 500 notices were mailed to facilities included in the program. Approximately, 30 people attended the workshop. Public comments received at the workshop, as well as those submitted in writing, are addressed below.

1. WRITTEN COMMENT

Notification by newspaper is unacceptable. Notification must be provided to "all exposed persons". Significant portions of the population do not read newspapers. Many residents in some areas do not speak English. The CAPCOA (California Air Pollution Control Officers Associations) Guidelines for notification make no provisions for notification other than by direct mailing to each household.

DISTRICT RESPONSE

With respect to alternative notification procedures, the CAPCOA guidelines state:

"The purpose of the CAPCOA Public Notification Guidelines is to provide districts with a tool, which can be used at their discretion, for developing notification procedures under the Air Toxics "Hot Spots" Program. Districts may choose to use the CAPCOA Public Notification Guidelines as written, make modifications, or develop notification procedures that differ from those discussed."

and;

"The district may prefer to use a notification procedure that consists of varying requirements as a function of the estimated risk associated with a facilities emissions. For example, the higher the risk above the district's notification threshold, the more stringent the notification requirements."

Nevertheless, the District agrees that newspaper notification would not be as effective as direct mailings for notifying "all exposed persons". Additionally, there does not appear to be significant costs savings associated with newspaper notification versus direct mail notification. Therefore, the procedures will be modified to require facilities to provide direct mail notification to all persons exposed to risks greater than 10 in one million.

2. WRITTEN COMMENT

Notification cannot be postponed until companies have completed a new [revised] Health Risk Assessment (HRA). The law requires notification when the initial HRA's are approved.

DISTRICT RESPONSE

The requirement of notification depends on two conditions, the first being that the HRA is approved, and the second that the District judges that the health risk associated with emissions from the facility exceed the District's proposed public notification level. The language of section 44362 of the Health and Safety Code does not require that the District's judgment of a facilities risk be limited to HRA results. When other reliable evidence of risk is available, the District intends to use it prior to making a determination that a facility must provide public notification. Several facilities have significantly reduced their emissions and may no longer have risks exceeding the Districts proposed public notification level. The District intends to allow these facilities to update their HRAs prior to determining their notification requirements.

3. **WRITTEN COMMENT**

Concrete deadlines must be established in the procedures, and penalties must be enumerated for failure to comply with them.

DISTRICT RESPONSE

The District will incorporate the following in the notification procedures. The preliminary determination of a facility's eligibility to base notification on an updated HRA will be provided by the District to each facility within 30 days of the adoption of the notification procedures. HRA protocols, if necessary, will be approved within 30 days of submittal. HRA approval will also be within 30 days of submittal.

Penalties for failure to comply with any requirement of the program are provided for in Section 44381 of the Health and Safety Code. Any facility that fails to meet the adopted notification requirements may be subject to District enforcement action.

4. **WRITTEN COMMENT**

Delaying notification during preparation of revised HRAs will not provide the public with information that is significantly more current than the information now available. The proposed rule allows companies an unspecified amount of time, after being notified by the District that they must notify, within which they may make changes to the facility for purposes of recalculating the HRA.

DISTRICT RESPONSE

Current approved HRAs are based on estimated 1989 emissions. Some facilities have substantially changed their emissions since 1989. In other cases, emission factors may have changed significantly. Facilities that qualify to delay notification during preparation of an updated HRA will be required, to the maximum extent possible, to use HRA procedures that have been previously approved by the California Office of Environmental Health Hazard Assessment (OEHHA) and the District. By using these approved procedures, the need for OEHHA review of revised HRAs is eliminated or minimized resulting in significant savings of time. The District estimates that updating HRAs will only delay notification by seven to nine months. Consequently, facilities will be notifying the public using data that is significantly more recent (about 3 years newer) than the 1989 data.

The District does not allow an unspecified amount of time within which a facility can make changes in order to qualify to revise its HRA. Facilities are allowed 30 days to comment on the District's preliminary determination of eligibility to update an HRA. The District will review all supplied

information within 30 days of submittal. If sufficient information necessary to demonstrate that the facility meets the specified criteria is not supplied within this time frame, the facility must proceed with notification based on the currently approved risk assessment.

5. WRITTEN COMMENT

The significant risk level should be set at 10 cancers per million for both notification and risk reduction. Other California statutes and other Districts have found 10 cancers per million to be an appropriate significant risk level. The Clean Air Act requires EPA to eventually go beyond MACT standards to set air toxics standards to protect health and safety down to a level of just one cancer case per million.

DISTRICT RESPONSE

It is not appropriate to compare risk thresholds established for other regulatory programs to those established for the Air Toxics "Hot Spots" Program. Other programs such as Proposition 65, the Federal Clean Air Act residual risk provisions (112(f)), and state toxics new source review programs generally do not establish a risk threshold for an entire industrial facility. Instead these risk thresholds apply to a single compound (as in Prop. 65), a single process (as in federal MACT standards), or a single project at a stationary source (as in toxic new source review programs). Therefore, a comparison of these thresholds to those established for the "Hot Spots" program are not valid.

In addition, the District's proposed notification and mitigation cancer risk levels are consistent with many of the California air districts. Following are the notification and mitigation cancer risk levels for the eight largest air districts in California:

	Notification Level	**Mitigation Level**
South Coast AQMD	10 in 1,000,000	100 in 1,000,000
Bay Area AQMD	10 in 1,000,000	100 in 1,000,000
San Joaquin Valley AQMD	10 in 1,000,000	100 in 1,000,000
Ventura APCD	10 in 1,000,000	100 in 1,000,000
Mojave Desert AQMD	10 in 1,000,000	100 in 1,000,000
Santa Barbara APCD	10 in 1,000,000	100 in 1,000,000
Sacramento AQMD	10 in 1,000,000	10 in 1,000,000
Monterey Bay AQMD	10 in 1,000,000	10 in 1,000,000
San Diego APCD (proposed)	10 in 1,000,000	100 in 1,000,000

All have a cancer risk notification level of 10 in one million and a risk mitigation level of 100 in one million except Sacramento AQMD and Monterey Bay AQMD which have a risk mitigation level of 10 in one million. The Sacramento AQMD advised there is only one affected business at the 10 in one million mitigation level and that business will be shutting down the equipment that causes the high risk for reasons unrelated to the "Hot Spots" program. Therefore, that company will not be required to do anything additional. The Monterey Bay AQMD advised that only one facility exceeded their 10 in one million mitigation level. It was a company that does welding and painting. The company installed a relatively simple filter system to reduce their risk level below 10 in one million. Nothing further is required. Both districts said if there were companies that would be significantly affected by the 10 in one million mitigation level, they would have given strong consideration to a 100 in one million risk mitigation level.

6. WRITTEN COMMENT

The allowable contents of the company letter will allow the notification process to be completely undermined. The draft procedures allow the company informational letter to include a discussion of emission rates, risk assessment results, and their uncertainty and conservatism. The procedures also provide that the discussion should not undermine the notification process. However, the district has no standard by which to judge whether the company letters undermine the process.

Nowhere in the process will the environmental community be able to challenge the HRA results as being not conservative enough, or provide information about historical risks, cumulative risks, and potential synergistic effects.

DISTRICT RESPONSE

The District will require that any discussion of emissions, risk assessment results, and risk assessment uncertainty be factual in nature. The requirement that facilities use factual data in their discussions will form the basis of the criteria the District will use to ensure facilities don't undermine the notification process. However, the District has no control over what information facilities distribute to the affected public independent of the official public notification nor what information environmental groups choose to distribute.

Cumulative risk and potential synergistic effects are discussed on the "Hot Spots" Fact Sheet as factors that may result in an underestimation of risks. However, the District has no estimates of historical risks prior to 1989 from these facilities.

7. WRITTEN COMMENT

The language of the District letter seriously downplays the risk and undermines the notification process. While the letter does acknowledge the potential of cumulative risks, it does not acknowledge other factors that the risk levels do not indicate: that cumulative risks may be substantially higher; that the HRAs cannot accurately estimate risks at short distances; that synergistic effects are not accounted for; that assumptions were based on 1989 emissions, and that historically, many industries emitted much greater levels of air toxics. The language of the letter is written at a level that the average person cannot understand.

DISTRICT RESPONSE

The District letter and the "Hot Spots" Fact Sheet that will accompany it give a balanced discussion of the facility risks and are entirely factual in nature. The Fact Sheet indicates that there is a level of uncertainty inherent in the HRA process and that there are factors that tend to result in an overestimation of risk (making health protective assumptions when data is uncertain) and factors that tend to result in an underestimation in risk (cumulative impacts, synergistic effects and impacts of compounds without established health effects values). By making this factual information available to the public, each individual can make a decision about the importance of the risks and the actions they may wish to take.

Other factors are not applicable or not appropriate for discussion in the District letter. Specifically, the fact that HRAs cannot accurately estimate risks at short distances was not a factor in any of the HRAs performed. The nearest receptors were always an adequate distance from the emission point. Additionally, any discussion of historical risks is speculative.

The District attempted to make the language of the letter as simple as possible and still provide the relevant technical data. The District will consider any recommendations that will make the letter easier to understand for the public being notified.

8. WRITTEN COMMENT

The procedure for updating health risk assessments that the District is proposing is extremely important if industry is to be encouraged to voluntarily reduce emissions as early as possible and to the maximum extent that is cost effective and technologically feasible. Facilities must be able to update their risk assessments based on updated emission inventory reports. We strongly support the District's approach and would work with the District to expedite the process. While the proposed procedures address "permanent, quantifiable and enforceable emission reductions," they must also include revisions to emission inventory reports as a result of corrections in data or changes in data based on changes in emission factors or methods of calculating these emissions.

DISTRICT RESPONSE

The District has established three criteria which must be met for notification to be postponed during preparation of an updated risk assessment. To be eligible to base public notification requirements on an updated emission inventory, a facility must:

1) have an updated toxic air contaminant emission inventory report that has been approved by the District;

2) demonstrate that the facility prioritization score, based on the approved updated emission inventory, indicates the facility risks have likely dropped below either the proposed public notification level or the proposed significant risk levels for risk mitigation; and

3) demonstrate that the decrease in prioritization score is the result of permanent, quantifiable and enforceable changes in estimated emissions.

These requirements limit the number of facilities eligible to postpone notification until a risk assessment is updated. However, the District agrees that corrections in data or changes in emissions due to District approved revisions in emission estimation methodology should be considered where possible prior to notification.

In response to this comment, the District has revised the third criteria necessary to delay notification pending preparation of an updated risk assessment to include a decrease in prioritization score that is a result of District approved changes in emission factors or methods of calculating emissions.

In addition, the District will consider the results of any updated HRA received and approved prior to the District requiring public notification.

9. WRITTEN COMMENT

In earlier drafts of this procedure, the exposure assumption of 24 hours per day, 365 days per year for 70 years was included when discussing the conservative procedure. However, this language has been deleted from the current draft. This language should be included as it is factual information from the program and therefore cannot be considered as undermining the notification process. In addition it should be stated that these conservative procedures are based on computer programs and that no air samples have been taken during this program.

DISTRICT RESPONSE

The exposure assumption reference has not been deleted from the procedures. It has however, been moved from the District letter to the Air Toxics "Hot Spots" Fact Sheet in an attempt to make the District letter shorter and more readable. The Air Toxics "Hot Spots" Fact Sheet will accompany each mailing. The Fact Sheet also states that the health risk assessment is an estimate of the possibility of adverse health impacts which is based on computer dispersion models.

10. WRITTEN COMMENT

We support the District's proposed levels of 100 in one million (100×10^{-6}) as the significant risk level for risk mitigation and the 10 in one million (10×10^{-6}) as the public notification level for cancer health risks.

DISTRICT RESPONSE

These values consistent with a majority of the other air districts in California.

11. WORKSHOP COMMENT

SB 1082 (Caulderon) requires OEHHA to review the health risk procedures used by the State. Preliminary indications of this process are that there are significant differences between the EPA and OEHHA risk assessment methodology. The risk assessments that the District is proposing to use for notification may not be based on the best available information. The District should consider postponing notification until the SB 1082 process is complete. The District has inadequate procedures for incorporating new information.

DISTRICT RESPONSE

The Health and Safety Code provides no authority for the District to delay public notification until the SB 1082 process is complete. Even after completion of the SB 1082 process, health risk assessment and emission estimation methodology will continue to evolve. Therefore, some level of uncertainty will always be inherent in the risk assessment process. It is not possible to postpone public notification until uncertainty is eliminated. However, where possible, the District plans on incorporating refinements in risk assessment and emission estimation procedures that result in more accurate estimates of risk.

12. WORKSHOP COMMENT

The District should state in the notification letters that there are disputes between risks estimated by EPA methods and California methods.

DISTRICT RESPONSE

Risk assessment is a complex and rapidly evolving science. Information about varying risk assessment methods and procedures would be confusing to most people and could undermine the notification process.

The Toxics "Hot Spots" Fact Sheet, which will accompany each mailing, will inform the public that the risk assessment process has a number of inherent uncertainties that can result in both overestimation and underestimation of risk. The public can request additional information concerning the complexities of the risk assessment process using the Public Response Survey Card that will be included in each notification.

13. WORKSHOP COMMENT

Will a Health Hazard Index (HHI) of greater than 1.0 still be considered significant?

DISTRICT RESPONSE

The District is proposing to consult with OEHHA when determining if facilities with a Total Hazard Index (THI) between one and five present a significant risk. A THI of greater than five will require public notification and a risk reduction plan.

14. WORKSHOP COMMENT

The procedures say that public meetings will be required if significant public interest is demonstrated. What number of phone calls would be considered significant?

DISTRICT RESPONSE

The District will make this determination on a case-by-case basis. If only a few people request additional information, the District may determine that those people should be contacted directly to save the effort and expense of a public meeting. However, public meetings will be required if a large number of people or a significant percentage of those notified request them.

15. WORKSHOP COMMENT

The District allows public notification to be postponed during preparation of an updated risk assessment if there is an indication the facility risk has dropped below the notification level or the significant risk level. The District should consider extending this provision to facilities that may have reduced their risk below threshold for media notifications (50×10^{-6}).

DISTRICT RESPONSE

Facilities are allowed to postpone notification during preparation of an updated risk assessment if the facility meets three criteria. One of the criteria is that there is an indication (based on prioritization score) that the updated risk assessment would fundamentally change the notification or risk reduction requirements for that facility. The District has eliminated the provisions for media notification for facilities with a risk between ten in one million (10×10^{-6}) and fifty in one million (50×10^{-6}). Therefore a drop below 50×10^{-6} would result in no fundamental change in notification requirements. The District will not incorporate this suggested change.

16. WORKSHOP COMMENT

There are hidden costs associated with direct notification. Some facilities have been required to provide public notification as a result of Proposition 65. These facilities would find it easier to provide a media notification than to prepare for a direct notification which may require legal review and consulting help. Also the costs to the facility may be higher due to an increased number of inquiries by the public. Having the option to use media notifications allows facilities to tailor the notification to what best fits their facility.

DISTRICT RESPONSE

The District agrees that direct notifications may generate more public interest. However, the goal of notification under AB 2588 is to inform the public of potential risks they are being exposed to and give them an opportunity to seek additional information. Public inquiry is part of the public notification and education process.

The District originally proposed to allow a media notification option for cancer risk levels between 10 and 50 in one million to reduce what was believed to be a significant cost impact on affected businesses. Recent cost information indicates the cost differential between direct and media notification is not significant and the District is now proposing to require direct notification for all cancer risks greater than 10 in one million.

17. WORKSHOP COMMENT

If a facility has made significant process changes that may put them below the notification level, what would the facility need to do to base notification on the current emissions.

DISTRICT RESPONSE

If the facility has made emission reductions that meet the criteria specified in the procedures, notification would be postponed during preparation of a revised risk assessment. The facility would have a specified amount of time to submit a risk assessment update protocol (if required) and prepare the risk assessment. Notification requirements would be based on results of the approved updated risk assessment.

If the facility has made emission reductions that do not meet the criteria, the facility may be eligible to base notification on an updated risk assessment if it is completed and approved prior to the District requiring that notifications be issued. Updated risk assessments must be based on approvable emissions and procedures.

18. WORKSHOP COMMENT

If prioritization indicates that the facility risk may be below the notification level would the facility be exempt from public notification?

DISTRICT RESPONSE

No. The facility would still be required to prepare an updated risk assessment. Notification requirements would then be based on the results of the updated risk assessment. The prioritization is only an indication of the magnitude of the change in risk and will be used only to determine if changes in calculated facility emissions are sufficient to qualify the facility to base notification on an updated risk assessment.

19. WORKSHOP COMMENT

It is unclear what criteria must be met to qualify a facility to use a media notification. The District should make it clear that all of the four requirements specified in the section entitled Public Notification Procedures - Cancer Risk Between 10 and 100 in One Million must be satisfied for a facility to qualify for this provision.

DISTRICT RESPONSE

As discussed in the response to Comment number 1 above, the District has deleted the provisions for media notification from the procedures.

20. WORKSHOP COMMENT

The District should consider eliminating the requirement that cancer burden must be less than 1.0 as a criteria for allowing alternative notification.

DISTRICT RESPONSE

As specified in comment number one above, the District has eliminated the provisions for media notification from the procedures. No revision is necessary.

21. WORKSHOP COMMENT

The draft notification procedures state that the risk reduction level will be 100 in one million. Is it the District's intention to implement the mitigation program (SB1731) now? If so, will the District require risk reduction within 5 years as indicated in the procedures?

DISTRICT RESPONSE

Adoption of these procedures establishes the District's significant risk level for risk mitigation. Facilities found to pose a significant public health risk are required to conduct an airborne risk reduction audit and develop a plan to implement risk reduction measures within six months of the District's determination of significant risk.

Risk must be reduced below the significant risk level within five years. However, the District may shorten this period if it is technically feasible and economically practicable to implement the plan more quickly, or that the emissions from the facility pose an unreasonable health risk. The District is authorized to lengthen the period by up to five additional years if it finds that this will not result in an unreasonable health risk and requiring implementation of the plan places an unreasonable economic burden on the facility or that implementation is not technically feasible.

22. WORKSHOP COMMENT

What is the status of the risk reduction audit and plan guidelines being developed by the Air Resources Board (ARB)?

DISTRICT RESPONSE

Guidelines for implementing risk reduction requirements are currently under development by several workgroups consisting of air district representatives and the ARB. General industry guidelines and specific industry guidelines for aerospace, autobody refinishing, chrome plating, degreasing and solvent cleaning, dry cleaners and gasoline stations are being developed. Each of these efforts is on a separate timeline. The general guidelines are expected be available in the spring or summer of 1996.

23. WORKSHOP COMMENT

The notification procedures have references to a significant risk level for notification. This is not consistent with the earlier statement that the significant risk level for public notification would be renamed the public notification level to eliminate any confusion over the definition of significant risk.

DISTRICT RESPONSE

At the time of the workshop, the District had not yet incorporated this change into the procedures. This has now been done.

24. WORKSHOP COMMENT

When does the District want to see data concerning revised emissions and health risk assessments.

DISTRICT RESPONSE

For facilities that qualify to postpone notification pending preparation of an updated risk assessment, a schedule for submittal and review of information is specified in the notification procedures. These facilities already provided revised emissions data in their 1993 emission inventory updates. For facilities that do not qualify to postpone notification pending risk assessment updating, or those whose emissions may have changed permanently since the 1993 inventory update, emission revisions and risk assessment updates can be submitted at any time. The District will attempt to review all submitted data as expeditiously as possible.

25. WORKSHOP COMMENT

The District should consider circulating an advisory informing facilities that the District is reviewing supplemental data concerning the eligibility to update health risk assessments.

DISTRICT RESPONSE

The draft notification procedures have been sent to all of the 30 facilities that would be required to provide public notification under the program. These facilities should therefore be familiar with the criteria and requirements necessary to postpone notification pending an updated risk assessment. Additionally, they will be given 30 days to respond to the District's preliminary determination to base notification on an updated risk assessment. These two provisions should provide sufficient notice to facilities wishing to supply additional data to the District.

26. WORKSHOP COMMENT

The District should not restrict the content of facility letters. Any such restriction would raise First Amendment issues.

DISTRICT RESPONSE

The only restrictions that will be placed on the facility letter are that the information be factual in nature and that it not undermine the public notification process. To allow information that the District knows is false or misleading to be sent with the District letter in a District envelope would undermine the notification process. However, the District has no control over what information facilities separately distribute to the public independent of the official public notification. The procedures do require the notifying facility to provide the District any additional information that the facility makes available to the public independent of the official notification process.

27. WORKSHOP COMMENT

Has the District discussed the practice of updating risk assessments prior to notification with OEHHA, the ARB and other air districts?

DISTRICT RESPONSE

ARB has stated that notification can be based on permanent and enforceable changes in emissions that have occurred prior to approval of the original risk assessment. Additionally, changes in public health risk resulting from changes in emissions that occurred after risk assessment approval may be presented along with the original risk assessment results in the public notification.

A number of other air districts allow risk assessments to be updated prior to public notification. These districts include South Coast Air Quality Management District (AQMD), Bay Area AQMD, and Sacramento AQMD. Allowing risk assessments to be updated provides the public with the most accurate and up-to-date information and provides a powerful incentive for facilities to expeditiously reduce risks. The District will allow facilities to base notification on an updated risk assessment instead of one that no longer represents the current facility risk.

28. WORKSHOP COMMENT

Has the District evaluated the impacts of notification in San Diego?

DISTRICT RESPONSE

The District has experience with one prior public notification. In the early 1990s a facility in north county sent out approximately 4000 letters informing the recipients of a potential excess cancer risk. That facility received approximately a half dozen responses to the notification. They then conducted a public meeting that was attended by approximately 75 people. The facility has subsequently reduced its risk below the public notification level.

TRW:jo
4/29/96

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

PROPOSED NEW RULE 1210
TOXIC AIR CONTAMINANT PUBLIC HEALTH RISKS - PUBLIC NOTIFICATION AND RISK REDUCTION

WORKSHOP REPORT

A workshop notice was mailed to approximately 500 facilities included in the Air Toxics "Hot Spots" Inventory and Assessment program, to interested parties, and to the U. S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB).

The workshop was held on April 9, 1996, and was attended by 45 people. Written comments were also received from three interested parties. No comments were received from the EPA or ARB. The following are the comments received and District responses.

1. WORKSHOP COMMENT

Are background concentrations included in the calculation of the Total Hazard Index (THI) for acute and chronic noncancer risks?

DISTRICT RESPONSE

No. The calculated chronic and acute noncancer THI's specified in the proposed rule do not include background concentrations of toxic or criteria pollutants.

2. WORKSHOP COMMENT

Why did the District eliminate the alternative notification provisions that were included in previous versions of the procedure? Did the District consider the costs of performing notification of acute risks in that decision?

DISTRICT RESPONSE

On November 21, 1995, the District held a public workshop to discuss the proposed procedures and criteria to be used to meet the public notification requirements of the Air Toxics "Hot Spots" program. At the beginning of the workshop, the District announced that it was proposing to eliminate the provisions in the draft notification procedures allowing alternative notification by newspaper notices. This was discussed at the workshop and there was general agreement that the alternative notification procedures would be eliminated.

One reason given by the District for eliminating the alternative notification was that, under this option, not all exposed persons would receive notice as required by the Health and Safety Code. Another reason was the cost of newspaper notices compared to that of direct mailings. The District estimated that the cost for direct mail notification will range from $200 to $400 per thousand. The cost for a notice in a major daily newspaper is approximately $6000 to $8000, depending on several factors. To reach as many exposed persons as possible, it is likely that the notice would need to run several times. Therefore, for most facilities there would be no real cost difference between direct mail notices and newspaper notifications. It was also noted that newspaper notices would reach many persons not actually impacted by emissions from the facility. There would likely be additional costs associated with responding to inquiries from those persons.

Generally, the notification areas for acute noncancer risks are much smaller than that for cancer risks. Therefore the costs of direct notification will be less for these facilities than those notifying based on cancer risk, and the costs savings of direct mailing versus newspaper notices will likely be greater for facilities required to notify based on acute noncancer risks.

3. WORKSHOP COMMENT

How will the District determine notification requirements for facilities that have THI's between 1.0 and 5.0? Can facilities submit additional information on compound toxicity for Office of Environmental Health Hazard Assessment (OEHHA) consideration?

DISTRICT RESPONSE

The District is proposing to consult with OEHHA when determining if facilities with a Total Hazard Index (THI) between 1.0 and 5.0 present a potential public health risk of concern. A THI of greater than 5.0 will require public notification and a risk reduction plan. To minimize delays, OEHHA will base their recommendation on current, already reviewed information. If additional information on toxicity is available, it should be submitted separately to OEHHA as soon as possible. However, this may not affect initial public notification.

4. WORKSHOP COMMENT

How will the District handle cumulative risks to the public?

DISTRICT RESPONSE

Health and Safety Code Section 44362 specifies that public notices required for the "Hot Spots" program be limited to discussion of the risks caused by the individual facility performing notification. Accordingly, the Rule 1210 notification requirements were developed to address risks resulting from a single facility. Public notifications will be based on, and will discuss, estimated potential public health risks due to emissions from individual affected facilities.

At this time, there are no practical methods or established criteria that the District can use to evaluate the cumulative impacts of multiple facilities and other sources of toxic air contaminants. The District will continue to follow developments in methods for evaluating cumulative risk.

5. WORKSHOP COMMENT

Isn't the Bay Area AQMD developing a model that can be used to evaluate cumulative risks?

DISTRICT RESPONSE

The Bay Area Air Quality Management District is developing a computer program that will facilitate input of data into certain existing air emission dispersion models. However, the model is not currently compatible with software that calculates facility risk. Therefore, it is currently of limited value for evaluating cumulative risk. The District will continue to follow developments in methods for evaluating cumulative risk.

6. WORKSHOP COMMENT

What would be the notification requirements if a facility has a cancer burden greater than one but a individual excess cancer risk of less than 10 in one million?

DISTRICT RESPONSE

The facility would be required to notify persons exposed to risks greater than 1 in a million. However, a facility could limit the notification area if the residual cancer burden beyond the proposed notification area, out to the 1 in a million risk level, would be below 1.0.

7. WORKSHOP COMMENT

What is the rationale for having the prioritization score as an absolute criteria for being eligible to update a health risk assessment? Why not allow any facility to update a risk assessment according to the schedule specified in Sections (d)(3)(iv) and (d)(4)?

DISTRICT RESPONSE

Facilities are allowed to update risk assessments at any time. However the District will not postpone notification during the preparation of an updated health risk assessment unless it has been demonstrated that significant emission reductions have occurred that may have fundamentally altered the facility's notification requirements. That means that prioritization scores must indicate that the facility may no longer be required to notify, or that the facility is no longer considered a potential source of significant health risk. The prioritization score is the best available method for determining comparative changes in risk short of preparing a revised risk assessment.

Allowing postponement of notification for facilities that do not meet this criteria could result in significant delays in the notification process even though there would be no real change in actual notification requirements. For example, this suggestion would allow a facility whose estimated cancer risk changes from 80 to 50 in a million to delay notification by several months without a significant benefit to the public or the facility. After this delay, the facility would be in exactly the same position it was in before the delay - having to notify the public through direct mailing. The procedures in Rule 1210 allowing delays in notification while updating 1989 risk assessments are intended to be limited to only those facilities whose changes in estimated health risks will fundamentally change the notification requirements for those facilities.

Nevertheless, facilities having approved health risk assessments prior to the date notification is required will be allowed to base notification on the most recently approved HRA.

8. WORKSHOP COMMENT

Risk assessments conducted for facilities in San Diego were done using conservative procedures. San Diego facility risk assessments indicate higher risks than risk assessments conducted in different air districts. There is a misconception that HRA's present real risks when in reality cancer risk is only statistical data.

DISTRICT RESPONSE

Risk assessments were prepared by consultants to facilities according to CAPCOA recommended procedures and have been reviewed and approved by OEHHA and the District. These risk

assessments were based on District approved emission inventory reports for the affected facilities. A combination of ARB guidance, EPA and ARB recommended emission factors, site-specific or industry sponsored pooled emission source tests, and good engineering judgment was used to develop the emission inventory reports. The District has been open to, and will continue to consider, comments regarding its emission estimating techniques. Certainly changes in emission factors will be considered in updates to the 1989-based HRA's.

The District cannot comment on the relative conservativeness of HRA's prepared for San Diego facilities versus those prepared in other air district jurisdictions. The District followed ARB, CAPCOA and OEHHA guidance. ARB is responsible for overseeing the implementation of this statewide program and would be in a better position to comment on the procedures followed in other air districts.

The District agrees that health risk assessments are statistical estimates of potential risks which have a degree of uncertainty. While the procedures for preparing HRA's attempt to ensure that risks are not underestimated and may tend to overestimate risks, consistent procedures are followed in order to evaluate comparative risks of toxic air contaminant sources. The proposed District notification letter points out that the risk estimates are based on conservative procedures designed to be health protective for all members of the public, including children and persons with pre-existing sensitivities. The letter further points out that the risk estimate does not include exposures to potentially toxic air contaminants for which there are no established health effects levels, nor the cumulative effects of exposures to toxic air contaminants from other sources.

9. WORKSHOP COMMENT

Section (d)(3) of the rule should require facilities who fail to comply with the schedule for updating a health risk assessment, or whose health risk assessment is disapproved by the District to provide notification based on the most recent approved health risk assessment. The draft rule currently allows District discretion in requiring notification under these circumstances.

DISTRICT RESPONSE

Subsection (d)(3) of the proposed rule has been modified as suggested. Facilities who fail to meet an update deadline or whose updated risk assessment is disapproved will be required to provide public notification based on the most recently approved risk assessment.

10. WORKSHOP COMMENT

The South Coast Air Quality Management District allows health risk assessments to be updated prior to notification. However, their update process is conducted on an expedited schedule. Updates are completed within two months. Can the District shorten the timeline specified in Sections (d)(3)(iv) and (d)(4)?

DISTRICT RESPONSE

The South Coast AQMD has contracted with an outside consultant to prepare updated health risk assessments. It is not clear at this time whether stationary source operators will agree with the results of the updated HRA's. Nevertheless, these updated HRA's are being prepared on an expedited schedule. These HRA updates rely on pre-approved emissions information that cannot be changed.

The District does not have an on-call contractor for preparing HRA's. To develop a request for proposals, obtain Board approval, develop specific HRA guidelines for the contractor to follow, advertise and award a contract and prepare the HRA updates could delay notification longer than the schedule proposed in Rule 1210. In addition, facilities may be unwilling to agree with the results of such District prepared updates and disputes could further delay notification. However, the District will give further consideration to this option and would appreciate comments from interested parties regarding such an approach.

11. WORKSHOP COMMENT

How does a source know what languages to provide notification in? How many total languages may need to be notified? Why did the District change the criteria for multilingual notifications from five percent to ten percent?

DISTRICT RESPONSE

The District has 1990 census data that estimates the percent of people in each census tract that are non-English speaking and the primary languages spoken. This data is available to affected facilities. Facilities will be required to provide notification in any language spoken by non-English speaking persons comprising more than five percent of the population of an impacted census tract, regardless of the number of languages. The change from five percent to ten percent was an error. The rule has been revised to specify five percent.

12. WORKSHOP COMMENT

Future meetings should be conducted at a time when the public is able to attend. It is difficult for private citizens to attend meetings during the middle of the day.

DISTRICT RESPONSE

If further meetings are held to discuss the public notification procedures, the District will consider holding such meetings in the evening. For public meetings held to discuss health risks from specific facilities, proposed Rule 1210 requires that public meetings be held at a time and place that facilitates public attendance. This will likely mean that such meetings are held in the affected communities, and in the evenings.

13. WORKSHOP COMMENT

How will facilities be required to notify employees of impacted businesses?

DISTRICT RESPONSE

Facilities must send notices to affected businesses. The businesses will be requested to circulate or post the notices. The following paragraph (iv) will be added to Subsection (d)(6) of the proposed rule to clarify this requirement.

> (iv) For each public notification directed to a business, a request that the business post or circulate the District public notification letter for review by all on-site employees of the business.

14. WORKSHOP COMMENT

The rule should specify a timeline for approval of the notification plan.

DISTRICT RESPONSE

The District agrees. Subsection (d)(5) of the proposed rule has been modified to add:

> The Air Pollution Control Officer shall approve, or revise and approve, the public notification plan within 30 days of receipt of the plan.

15. WORKSHOP COMMENT

Does the anticipated cost for notification that the District has stated include District costs for review of the notification plan and other related activities?

DISTRICT RESPONSE

The estimated notification costs of between $200 and $400 per thousand are the costs of direct mailing. This does not include the District's costs associated with the notification process. These costs will be recovered by the District on a facility-specific time and material basis as specified in District Rule 40(m).

16. WORKSHOP COMMENT

Can facilities use this notification to fulfill requirements of other programs such as Proposition 65? Can facilities include other information or notices (such as Proposition 65 notices) in the same mailing?

DISTRICT RESPONSE

The notification requirements proposed in Rule 1210 are not intended to and likely will not fulfill the notification requirements of Proposition 65. Proposition 65 requirements are different. The District is concerned about the appropriateness of including a Proposition 65 notice in the same mailing as the Rule 1210 notification letter. Having both notices in a District labeled envelope might infer some official sanction of the Proposition 65 notice by the District. Having both notices together might also confuse people about the emphasis of the mailing.

If a Proposition 65 notice were to be included in the same envelope, it would need to include a statement disclaiming District approval of the information included in the Proposition 65 notice. Moreover, if the District were to allow such notices to be included, it would have to be with the clear understanding that the District was making no judgment as to whether such notice was complying with the requirements of Proposition 65.

The District will consider allowing Proposition 65 notices to be included in the Rule 1210 public notification mailings, on a case-by-case basis, if it finds that the Proposition 65 notice will not undermine the intent and content of the Rule 1210 notification letter. Proposed Rule 1210 has been modified to reflect this and to ensure that no other additional material may be included in the notification mailings.

17. WORKSHOP COMMENT

Section (d)(12) of the proposed rule requires the facility to provide a public health risk assessment summary to anyone requesting this additional information within 30 days of the notification. Section (d)(13) requires public meetings if, based on the public response received within 30 days of public notification, the District determines on a case-by-case basis, that a public meeting is required. Can these requests be made by any interested party or only by persons who have received a public notice?

DISTRICT RESPONSE

The intent of the program is to make information available to people who are being exposed to risks exceeding the District's notification level. Therefore, requests for additional information should come from the exposed persons and not from persons outside the notification area. Subsection (d)(12) has been changed as follows:

> (12) The owner or operator of a stationary source shall prepare and distribute a public health risk assessment summary to those ~~notified~~ persons receiving notice pursuant to this rule requesting additional information within 30 days of such requests.

Subsection (d)(13) has been changed as follows:

> (13) If, based on the public response ~~received~~ from persons receiving notice pursuant to this rule within 30 days of public notification, the Air Pollution Control Officer determines on a case-by-case basis, that a public meeting is required, the Air Pollution Control Officer shall so notify the owner or operator of the affected stationary source and the owner or operator shall hold a public meeting within ~~60~~ 90 days after public notification.

The District is proposing to allow an additional 30 days (90 days versus 60 days) to hold the required public meetings to ensure adequate time for scheduling the meetings and providing notice to the public. The current 60 days was determined to be inadequate considering that requests for meetings can be made up to 30 days after notification, the District must then determine the need for a meeting, advise the facility, the facility must find and schedule an appropriate location, ensure that appropriate translators are present, and provide direct notice of the meeting to interested persons not less than 14 days prior to the meeting.

18. WORKSHOP COMMENT

Annual notification should be required until facility risk falls below the proposed notification levels. Annual notifications are needed to inform all exposed persons that move into the notification area after the initial notification has occurred and to provide added incentive to facilities to reduce risks.

DISTRICT RESPONSE

The District is concerned that annual notifications would be too frequent for facilities that are not required to reduce their risks. Under state law such facilities are required to update their emissions inventories, and risk assessments if required, every four years. However, four years between notifications would not be appropriate. Accordingly, the District has modified the proposed rule to require annual notifications for facilities with risks above the significant risk mitigation levels, and

biennial notifications for facilities with risks below the significant risk mitigation levels but above the public notification levels.

19. WORKSHOP COMMENT

How must requests for additional information be made? Such requests should be in writing.

DISTRICT RESPONSE

To ensure that all requests for additional information reach the appropriate person and are responded to in a timely manner, the proposed rule has been modified to require all such requests be made in writing or via the Public Response Survey Card included in the notification package. Subsection (d)(12) will now include:

> Such requests shall be in writing or by appropriately marking and returning the "Public Response Survey Card" specified in Subsection (d)(6).

Written requests may be directed to either the District or to the stationary source providing public notification.

20. WORKSHOP COMMENT

Will the District be prepared to handle requests for additional information? Will the District be able to handle requests by non-English speaking persons?

DISTRICT RESPONSE

Rule 1210 requires that affected facilities prepare and provide to the District a public health risk assessment summary. The District, as well as affected facilities, will provide that summary upon request. In addition, the District will respond to questions, calls, inquiries and requests for additional information within the limits of available resources and will make every effort to handle requests by non-English speaking persons.

21. WORKSHOP COMMENT

Can an APCD sanctioned letter be developed that advises the public that risks have been reduced and that they are no longer being exposed to risks from a particular facility above the notification levels?

DISTRICT RESPONSE

The District encourages facilities that have reduced their risks below the notification levels to advise the public. The District would review and concur with a notice to that effect.

22. WORKSHOP/WRITTEN COMMENT

Companies should be required to reduce their risks to 10 in one million. This level has been found to be the significant risk level in other California legislation.

DISTRICT RESPONSE

It is not appropriate to compare risk thresholds established for other regulatory programs to those established for the Air Toxics "Hot Spots" Program. Other programs such as Proposition 65, the Federal Clean Air Act residual risk provisions, and state toxics new source review programs generally do not establish a risk threshold for an entire industrial facility. Instead these risk thresholds apply to a single compound (as in Proposition 65), a single process (as in federal MACT standards), or a single project at a stationary source (as in toxic new source review programs). Therefore, a comparison of these thresholds to those established for the "Hot Spots" program are not valid.

The proposed notification and significant risk mitigation levels for cancer risks in Rule 1210 are consistent with other California air districts. Following are the notification and mitigation cancer risk levels for the eight largest air districts in California:

	Notification Level	**Mitigation Level**
South Coast AQMD	10 in 1,000,000	100 in 1,000,000
Bay Area AQMD	10 in 1,000,000	100 in 1,000,000
San Joaquin Valley AQMD	10 in 1,000,000	100 in 1,000,000
Ventura APCD	10 in 1,000,000	100 in 1,000,000
Mojave Desert AQMD	10 in 1,000,000	100 in 1,000,000
Santa Barbara APCD	10 in 1,000,000	100 in 1,000,000
Sacramento AQMD	10 in 1,000,000	10 in 1,000,000
Monterey Bay AQMD	10 in 1,000,000	10 in 1,000,000
San Diego APCD (proposed)	10 in 1,000,000	100 in 1,000,000

All have a cancer risk notification level of 10 in one million and a risk mitigation level of 100 in one million except Sacramento AQMD and Monterey Bay AQMD, both having a risk mitigation level of 10 in one million. The Sacramento AQMD advised there is only one affected business at the 10 in one million mitigation level and that business will be shutting down the equipment that causes the high risk for reasons unrelated to the "Hot Spots" program. Therefore, that company will not be required to do anything additional. The Monterey Bay AQMD advised that only one facility exceeded their 10 in one million mitigation level. It was a company that does welding and painting. The company installed a relatively simple filter system to reduce their risk level below 10 in one million. Nothing further is required. Both air districts stated that if there were companies that would be significantly affected by the 10 in one million risk mitigation level, they would have given strong consideration to a 100 in one million risk mitigation level.

23. WORKSHOP COMMENT

Subsection (e)(3)(ii) should be revised to require the Air Pollution Control Officer to consider whether the annualized cost of the airborne toxic risk reduction measures necessary to meet the public health risk levels of (e)(3)(i) are less than (as opposed to greater than) 10 percent of the proceeding five-year average return on equity. This would be clearer and more parallel in structure with the other parts of Subsection (e)(3).

DISTRICT RESPONSE

This change has been incorporated into the proposed rule. In addition, the reference in Subsection (e)(3)(ii) to the public health risk levels in Subsection (e)(3)(i) has been changed to instead refer to the significant risk mitigation levels in Subsection (e)(1). This is to ensure that the District can

consider the economic impacts of shortening the risk reduction period for all risk reduction measures, not just those needed to bring cancer risks below 250 in a million and noncancer THI's below 10.0. This will make proposed Rule 1210 more consistent with state law.

24. WORKSHOP COMMENT

If more than one facility is impacting an area, additional criteria should be applied in the determination of what constitutes an unreasonable health risk.

DISTRICT RESPONSE

As noted in the response to Workshop Comment No. 4, there are no methods available to determine cumulative risks from multiple sources of toxic air contaminants. However, in determining whether a facility that is required to reduce public health risks should be allowed less than or more than five years to reduce those risks, the District will consider whether there are additional facilities with estimated risks above the significant risk mitigation levels that are impacting the same persons. Subsections (e)(3) and (e)(4) of the proposed rule have been modified accordingly.

25. WORKSHOP COMMENT

Does the rule address temporary increases in risk?

DISTRICT RESPONSE

Neither the authorizing sections of the Health and Safety Code nor the proposed rule specifically address temporary increases in risk. However, Subsection (e)(5)(vi) of the proposed rule requires the facility risk reduction audit and plan to include any reasonably foreseeable new or increased emissions of toxic air contaminants and their resulting risks. This would include foreseeable temporary increases in toxic air contaminant emissions and risks. In addition, temporary increases in emissions or risks that require new or modified District permits will be reviewed for potential public health impacts under the District's Rule 51 toxic air contaminant review policy or proposed District Rule 1200, if adopted.

26. WORKSHOP COMMENT

Are their standard procedures for auditing the data used to make the determination described in Subsection (e)(3)(ii)?

DISTRICT RESPONSE

The return on equity of a stationary source will be determined by the District based on financial records for the source and using a standard mathematical formula. Typically, the financial records will have been reviewed and certified by an outside auditing firm. If that is not the case and the financial records of the owner or operator are in question, the District may request that the records be certified by an independent auditor. The District may also request additional financial information from the owner or operator if necessary to determine the return on equity.

27. WORKSHOP COMMENT

Will the financial records provided by a source be treated as trade secret or confidential.

DISTRICT RESPONSE

The financial records of a source are likely already public information if the source owner or operator is a publicly-owned corporation, a corporation with publicly-traded stock, a government agency or a public utility. In most cases, the financial records that a source would supply the District for review to determine the economic reasonableness of risk reduction measures cannot be considered trade secret or confidential by the District.

28. WORKSHOP COMMENT

Costs to the public, such as health care costs, should be taken into consideration in the decision of whether a facility is allowed to lengthen the period to reduce risks below the significant risk levels as allowed in Subsection (e)(4).

DISTRICT RESPONSE

Such an analysis would be beyond the scope of the District's current capabilities and information and would delay implementation of reductions of significant risks. The HRA's provide upper bound estimates of potential public health risks. There is no certainty that adverse health effects will actually occur, nor that there would be actual health care costs that result from an individual facility's emissions. Although it may be generally recognized that there are public health costs associated with the emissions of toxic air contaminants on a regional or national level, the District is not aware of any accepted method that could be used to apportion those costs to an individual facility, nor how such information would weigh in the District's decision whether to allow a facility less than or more than five years to reduce its risks below significant risk mitigation levels.

The recognition of public health costs is inherent in the underlying authority in the Health and Safety Code to require that risks be reduced and to allow air districts to require reductions in less than five years if appropriate. The Health and Safety Code does not authorize the air districts to consider public health costs in determining the risk reduction schedule for a particular facility.

29. WORKSHOP COMMENT

Consideration of the potential health impacts associated with risk reductions measures should be taken into consideration.

DISTRICT RESPONSE

Consideration of the potential health impacts associated with any toxic air contaminant emissions that result from risk reductions measures will be a required component of a risk reduction audit and plan. Other potential environmental, public health or safety impacts (e.g. storage of more flammable materials) fall within the purview of other agencies and are the responsibility of the facility which must develop its own risk reduction audit and plan. The Health and Safety Code does not authorize air districts to consider such other impacts. Moreover, the role of air districts is limited primarily to determining that a facility's plan is complete and meets all the requirements of the Health and Safety Code.

30. WORKSHOP/WRITTEN COMMENT

The proposed risk reduction guidelines should not be included as part of this rule. The notification process is already behind schedule. Development of the risk reduction rule could cause further delays. Development of the risk reduction rule should occur in a manner that will not postpone the notification process any further.

DISTRICT RESPONSE

Section 44391 of the Health and Safety Code requires facilities that are determined by the District to be a potential significant public health risk to submit a risk reduction audit and plan within six months of notification of that determination. This will happen at the same time that the facilities are told they must notify the public. Facilities whose HRA's estimated potential risks above the significant risk mitigation levels will be required to simultaneously proceed with public notification and preparation of a risk reduction audit and plan. In addition, because of the delays in implementing public notification, it is appropriate to move forward with actions to reduce significant risks as soon as possible.

In order for a facility to prepare an acceptable risk reduction audit and plan and for the District to have criteria by which to evaluate it, it is necessary to have risk reduction guidelines. The District has therefore developed the notification procedures and the risk reduction guidelines and proposed both in Rule 1210. Based on comments received on both elements of the proposed rule, the District does not anticipate that this will result in further delay in public notification. However, if issues associated with the risk reduction requirements develop that could delay notification, the District could propose that the risk reduction elements of the rule be developed under a separate rulemaking.

31. WORKSHOP/WRITTEN COMMENT

Allowing recalculation of the facility risk is contrary to the letter and intent of the law. Revision of the Health Risk Assessments (HRA's) will delay the notification process as well as prevent the original data from being distributed.

DISTRICT RESPONSE

Current approved HRA's are based on estimated 1989 emissions. Some facilities have substantially changed their emissions since 1989. In other cases, emission factors and toxicities may have changed significantly. Only facilities that meet specified criteria will qualify to delay notification during preparation of an updated HRA. By using approved procedures in updated HRA's, the need for OEHHA review is eliminated or minimized, resulting in significant savings of time. Updating HRA's will delay notification by seven to nine months. Facilities will be notifying the public using data that is significantly more recent (typically 1993 data) and likely more reliable than the 1989 data. Public notifications based on updated risk assessments will state that the 1989 HRA's are available for review by interested members of the public. District counsel has advised that the Health and Safety Code does not preclude an air district from allowing a health risk assessment to be updated in these circumstances.

32. WORKSHOP/WRITTEN COMMENT

The proposed rule requires a public notification letter which is "similar to the model notification letter provided by the Air Pollution Control Officer." This proposal is unacceptable. A facility notification letter written by the District must be a required part of the notification process.

DISTRICT RESPONSE

The District agrees. Subsection (d)(5)(i) of the proposed rule has been clarified as follows:

> (i) A proposed public notification letter to be signed by the Air Pollution Control Officer. The proposed notification letter shall be ~~similar~~ identical in form and text to the model notification letter provided by the Air Pollution Control Officer and shall include the additional stationary source-specific information required by the model notification letter.

33. WORKSHOP/WRITTEN COMMENT

Companies should be required to continue to notify (the public) until their risks are reduced below 10 excess cancer cases per million. A one-time notification will not serve the dual purposes of the notification process which are to notify the public about air toxic health risks being caused by local industries, and to provide an incentive for industries to reduce risks. A one-time notification will not provide notification to those that move into an area subsequent to the first notification.

DISTRICT RESPONSE

The District will modify the proposed rule to require biennial notification for facilities with above the public notification levels but below the significant risk mitigation levels. (See also the response to Workshop Comment No. 18.)

34. WRITTEN COMMENT

The criteria for assessing risk reduction timing requirements are too heavily weighted towards the interests of business, rather than protecting public health. The criteria by which the APCO will assess whether a stationary source will be required to reduce their risk levels in less than five years, or will be given an extension of an additional five years to reduce their risk levels are extremely vague, and it is unclear how they will be applied.

Moreover, these criteria are heavily weighted towards assessing the impact of risk reduction on the company rather than on the surrounding community. For example, there are no standards included in the rule to determine what would pose "an unreasonable risk to public health."

Furthermore, cost estimates of risk reduction implementation should be compared to cost estimates of increased health care costs should the risk not be reduced. Any assessment of the unreasonableness of the economic burden to reduce risk on a stationary source must also consider the unreasonableness of the public health burden the facility is asking the public to bear.

DISTRICT RESPONSE

The proposed criteria in Rule 1210 for determining whether to allow a source to reduce its risks below the significant risk mitigation levels in less than or more than five years are consistent with criteria that the Health and Safety Code (Section 44390 et seq) authorizes the District to consider.

The proposed rule provides for "unreasonable" risk levels of 250 in one million for excess cancer risks, and chronic and acute THI's of 10.0. The latter are consistent with draft ARB guidance on unreasonable risks. ARB had suggested an unreasonable cancer risk level of 100 in a million but that was based on a final cancer risk mitigation level of 10 in a million, i.e. ten times the cancer risk mitigation level. The District estimates, based on available risk information, that a risk level of 250 in one million will ensure that approximately 80 percent of the population weighted excess cancer risk (i.e. cancer burden) from risks above the significant risk mitigation levels will be reduced in five years or less.

Subsection (e)(3) of proposed Rule 1210 authorizes the Air Pollution Control Officer to require a facility to reduce its cancer risks below 250 in a million, or below acute or chronic THI's of 10.0, in less than five years if it is technically feasible to do so. The District will also consider whether it is economically reasonable for the facility to reduce risks below the significant risk mitigation levels in less than five years, and whether the technologies involved are proven in field application. (See also the response to Workshop Comment No. 28).

35. WRITTEN COMMENT

The District should drop cancer burden of one (1) or greater as a level requiring public notification. Facilities that have a cancer burden greater than one would most likely have a cancer risk greater than ten (10) in one million due to San Diego's population distribution.

DISTRICT RESPONSE

The public notification level based on a cancer burden of 1.0 or greater is needed to ensure that large populations exposed to risks just below 10 in a million are adequately notified. However, such a circumstance is unlikely for a properly prepared health risk assessment.

36. WRITTEN COMMENT

An alternative requirement for public notification using multiple means of notification (i.e. newspapers, TV, radio, flyers) should be available to facilities where direct mailing costs are excessively burdensome. A framework should be developed by the APCD to determine when costs are burdensome.

DISTRICT RESPONSE

The District has determined that the most effective means of notifying all exposed persons, as required by the Health and Safety Code, is by direct mailing. Newspapers, television, radio and flyers will not be as effective as direct mailing because these media are not used by all exposed persons. Additionally, for a typical facility, there does not appear to be overriding costs savings associated with newspaper notification versus direct mail notification. Moreover, media notifications will be received by many more persons than actually exposed to risk levels of concern. The costs of responding to more concerned persons than just those who would have received direct mailings could also be significant. (See also the response to Workshop Comment No. 2).

37. WRITTEN COMMENT

HRA submissions to the State have shown the San Diego region to have a disproportionate number of facilities over the 10 in one million level. This is possibly due to the SDAPCD using emission factors that are far more conservative than other districts. Therefore it is requested that SDAPCD compare their emission factors to these other districts in order to obtain a more realistic risk evaluation, especially in cases involving hexavalent chromium emissions.

DISTRICT RESPONSE

Emissions of toxic compounds from many processes had never been quantified prior to the Air Toxics "Hot Spots" Program. When it became necessary to do so, each district used source testing data, engineering analysis and other available data to estimate emissions from these processes as accurately as possible. Therefore, it is likely that differences in emission estimation techniques between various air districts exist. Which of these techniques is most accurate has not been determined and it is unlikely it will be in the near future. Although the District believes that a comparison of emission estimation techniques should be done (by the Air Resources Board), such a comparison is unlikely to result in any definitive information that can be used in a comparison of notification levels or significant risk levels at this time. In addition, as part of updates to emissions inventories, emission factors are updated and facilities may suggest alternative factors with adequate supporting documentation. (See also the response to Workshop Comment No. 8).

38. WRITTEN COMMENT

Subsection (d)(3)(ii) of the proposed rule states that reduction of the facility prioritization score must show that the health risk will fall below notification levels in order to qualify to base notification on an updated HRA. Basing criteria for qualifying to update a HRA on prioritization score is inadequate. It is possible that the overall facility health risk can significantly decrease even if prioritization score remains the same or even increases. This can happen because prioritization score does not take into account stack release parameters, building downwash, operational schedule or meteorological data. (Several hypothetical examples were presented.)

DISTRICT RESPONSE

It is correct that a prioritization score is not always directly proportional to risk. However, it is the best indicator of the relative change in risk for a given facility short of actually revising the health risk assessment. The District's intent in allowing some facilities to update heath risk assessments was to allow facilities that may have significantly reduced risks enough to fundamentally change their notification requirements to evaluate that change and base notification requirements on the revised health risk assessment. The intent was not to allow all facilities which may have minor risk reductions, or perhaps risk increases, to delay public notification.

Affected companies have been advised for at least six months that any facility updated health risk assessment will be considered if approved prior to the date public notification is required. (See also the response to Workshop Comment No. 7).

39. WRITTEN COMMENT

Other air districts, including the South Coast Air Quality Management District and Ventura County Air Pollution Control District, do not use cancer burden as a criteria for determining public notification and risk mitigation requirements. The provision of requiring public notification for all

areas exceeding a cancer burden of one greatly increases the geographic notification area. Considering the extremely conservative assessment methodology, we request that you establish thresholds consistent with other air districts.

DISTRICT RESPONSE

The public notification level based on a cancer burden of 1.0 or greater is needed to ensure that large populations exposed to risks just below 10 in a million are adequately notified. However, such a circumstance is unlikely for a properly prepared health risk assessment. A facility whose approved health risk assessment showed cancer risks below 10 in a million but a cancer burden above 1.0 would be required to notify persons exposed to risks greater than 1 in a million. However, a facility could limit the notification area if the residual cancer burden beyond the proposed notification area, out to the 1 in a million risk level, would be below 1.0.

40. WRITTEN COMMENT

Section 44360 of the Health and Safety Code is referenced in Rule 1210. Are public utilities or the Navy, which are not considered businesses obliged to notify under this rule?

DISTRICT RESPONSE

The appropriate reference is to Section 44362 of the Health and Safety Code. It requires operators of an affected facility (not business) to provide notice to all exposed persons. Section 44304 of the Health and Safety Code defines "facility" as "every structure, appurtenance, installation, and improvement on land which is associated with a source of air releases or potential air releases of a hazardous material." This would include the air contaminant emitting activities and operations of public utilities and the Navy.

41. WRITTEN COMMENT

The draft rule exempts stationary sources for which industry-wide generic public health risk assessments are prepared by the Air Pollution Control Officer pursuant to Section 44323 of the Health and Safety Code. These facilities should not be given special status.

DISTRICT RESPONSE

Facilities for which industry-wide public health risk assessments are prepared will not be exempt from public notification requirements. However, the notification and risk reduction procedures for such facilities will likely be different and have not yet been developed. The procedures specified in proposed Rule 1210 require a facility-specific health risk assessment. Requiring facility-specific health risk assessments for small facilities such as gas stations and dry cleaners is not practical or cost-effective. Notification procedures which are appropriate for these facilities will be developed and implemented through a separate rule or future amendments to Rule 1210.

42. WRITTEN COMMENT

The definition of contiguous property could be interpreted as meaning that two facilities connected by a process line across a "navigable" body of water could be considered contiguous. This was probably not the intent. Could you clarify this?

DISTRICT RESPONSE

In the unlikely circumstance described, such facilities could be considered contiguous and part of a single stationary source. The proposed definition of contiguous in Rule 1210 is consistent with the District's NSR definition of contiguous.

43. WRITTEN COMMENT

The terms "acute" and "chronic" should be defined in the rule.

DISTRICT RESPONSE

These are terms that have been in common use for some time and have not created problems of interpretation. Generally chronic refers to long-term exposures and health effects and are typically evaluated based on a maximum one-year exposure. Acute refers to short-term exposures and health effects and often is evaluated based on maximum one-hour exposures. There are a few exceptions to these norms based on recommendations from the state Office of Environmental Health Hazard Assessment.

44. WRITTEN COMMENT

The definition of "Industry-Wide Generic Public Health Risk Assessment" in Subsection (c)(8) includes a requirement that the majority of included facilities be composed of small businesses. While local gas stations are generally managed as a small business, the environmental compliance issues are frequently the responsibility of a large petroleum company. Therefore, these facilities should not be exempt from this rule. What are examples of facilities which you expect would be exempt?

DISTRICT RESPONSE

Gas stations are being evaluated on an industry-wide generic basis in accordance with ARB, practical considerations, and the consensus of participating air districts. Other examples of industry-wide sources are dry cleaners and automotive repainting facilities.

45. WRITTEN COMMENT

What is meant by the "potential maximum exposed individual"? Does an individual have to be located there? Could a "Maximum Incremental Cancer Risk" be located in the middle of a freeway, or on the side of a cliff, or inside the property boundary?

DISTRICT RESPONSE

Definition 9 in Section (c) of the proposed Rule 1210 states:

> (9) **"Maximum Incremental Cancer Risk"** means the estimated probability of the maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants emitted from the stationary source.

The maximally exposed individual implies that there is an actual potential for either a short term exposure (in the case of acute health impacts) or long term exposure (in the case of cancer or chronic noncancer health impacts). For a risk assessment that is looking back to estimate previous potential risks, a maximally exposed individual would not be located in the middle of a freeway or on the side of a cliff. In other words, the maximum incremental cancer risk should be determined at the point of maximum exposure where there is a reasonable expectation that persons would be exposed. Typically, exposures and risks to persons inside a facility's property line are not determined in an HRA since such persons are likely not the general public and such exposures are regulated by other agencies or programs such as OSHA and Proposition 65.

46. WRITTEN COMMENT

Will any planned changes to the Prioritization Score methodologies be workshopped?

DISTRICT RESPONSE

All future changes to the prioritization score methodologies will be discussed at a public workshop.

47. WRITTEN COMMENT

A health risk assessment is only an estimate of potential cancer and non-cancer public health risks. The word "quantify" used in the definition of "Health Risk Assessment" should be replaced with "estimate".

DISTRICT RESPONSE

The District partially agrees with this comment. A health risk assessment is an estimate, albeit a quantitative estimate, of potential cancer and non-cancer public health risks. It is necessary to quantify, not just estimate, public health risks in a health risk assessment. The definition has been clarified by adding that the HRA is a study to "...quantify the estimated potential cancer and noncancer public health risks..."

48. WRITTEN COMMENT

Will you allow health risk assessment protocols which do not adhere to the CAPCOA Guidelines?

DISTRICT RESPONSE

Updated health risk assessments must be conducted according to the CAPCOA Health Risk Assessment Guidelines and must be approved by the District. If a facility wanted alternative methodologies to be considered, it should have proposed those methodologies for approval months ago.

49. WRITTEN COMMENT

For a given census tract a facility may exceed the notification levels for residents but not for the occupational receptors. Will occupational receptors have to be notified in that case?

DISTRICT RESPONSE

Generally not. Separate notification areas for residential and occupational receptors will be allowed if a facility submits an acceptable justification. HRA preparers should be aware that exposure adjustments for occupational areas are not appropriate for stationary sources that operate for eight hours per day or less.

50. WRITTEN COMMENT

Facilities should be able to update health risk assessments per the provisions of Subsection (d)(3) for any year not just 1989. It is possible that errors are found in emissions, source test data had taken too long to approve by the District, or that the facility reduces emissions prior to notification being required in which case the facility should be able to revise the HRA or demonstrate that public notification should not be required. The procedures should account for future rounds of health risk assessments. Subsection (d)(3)(i) should be triggered not only within 15 days of adoption but also within 15 days of approval of the health risk assessment.

DISTRICT RESPONSE

The basis and timing for public notification requirements are contained in Subsection (d)(1). That subsection is generic for current and future HRA's once they have been approved by the District. Subsection (d)(3) provides a one-time exception for the 1989 HRA's because of the delays in HRA approvals and completion of the notification procedures. Such an exception is not contemplated for numerous facilities in the future. If, in the future, a facility finds that its HRA is in error or conditions have substantially changed prior to notification, it should notify the District, in writing, immediately.

51. WRITTEN COMMENT

If notification plans must be approved by corporate council, 45 days may not be sufficient time for preparation.

DISTRICT RESPONSE

Facilities that will be required to provide public notification have been or will be aware of that likelihood well before the official District notice that notification is required. Such facilities should have outlined their notification plans and consulted corporate council in advance. Forty-five days should be sufficient to prepare the final version of a proposed notification plan.

52. WRITTEN COMMENT

Will the language of the District notification letter be workshopped? The District letter should state that the procedures used to estimate the risks under AB-2588 are designed to aide in comparing facilities and are not necessarily representative of actual risks. The language of the letter could lead to nuisance lawsuits if it is not carefully crafted. The letter should be different for occupational and residential receptors because of some of the assumptions. The letter should give people information that they can make use of such as the assumption of dirt ingestion and backyard garden intake. In this way the public can alter their habits to decrease the risk if they are particularly concerned. The letter should state that most of the chemicals which are considered to be carcinogenic have not been proven to cause cancer in humans, and that the actual cancer causing

potential in humans is not known. The letter should also mention that it was assumed that any amount of a carcinogenic compound could lead to cancer, and that some carcinogenic compounds appear to have threshold values.

DISTRICT RESPONSE

A model District notification letter has been discussed at a public workshop and with public and industry focus groups on several occasions. A copy of the model letter is available on request. The letter does attempt to put the results of the risk assessments in perspective and discusses some of the conservative aspects of the HRA's, as well as some of the additional impacts that are not addressed by the HRA's (e.g. emissions of contaminants lacking toxicity information or recommended exposure levels). Some of the suggestions in this comment would tend to confuse notice recipients and/or undermine the purpose of the notification.

53. WRITTEN COMMENT

Will the APCD "Public Response Survey Cards" include postage or will facilities have to put their own return postage guarantees on them? Will the District provide "Public Response Survey Cards" and "Air Toxics Hot Spots Fact Sheets" in all the languages notices may be required in? Has the District considered that having different envelope labels may preclude bulk mailing because of the requirement that all packages be identical?

DISTRICT RESPONSE

The District will provide return postage for the "Public Response Survey Cards". All materials included in the public notification must be printed in those languages which are the primary language of non-English speaking persons comprising 5 percent or more of the total persons to be notified in each census tract. The portion of the "Public Response Survey Card" which requests additional information will be printed in five languages (English, Spanish, Tagalog, Chinese and Vietnamese). Approximately 96% of the population of San Diego County speaks one of these languages. Bulk mailings can be made for any number of envelopes greater than 200. Therefore, it is not necessary for all labels to be identical.

54. WRITTEN COMMENT

How many languages in San Diego County are expected to be triggered for multilingual notifications? Will any of the languages require special type-face (i.e. Chinese, Japanese, Korean, Filipino, Vietnamese)?

DISTRICT RESPONSE

Based on 1990 census data, approximately 96 percent of the population of San Diego County speaks one of five languages - English, Spanish, Tagalog, Chinese and Vietnamese. About 25 percent of the 445 census tracts that make up San Diego County have populations, exceeding five percent of the total, that speak some other language besides the five listed above. If the percentage of people speaking a given language in a census tract exceeds 5 percent, notices must be printed and distributed in that language. Some of the languages will require special type faces. It will be the responsibility of the facility to determine the appropriate languages for notification and to print and distribute the notices in those languages.

55. WRITTEN COMMENT

Can the discussion of the risk assessment include a factual discussion of the assumptions required and that the procedures were developed in order to compare risks between facilities? The facility should also be able to discuss errors in the HRA which may have been found after it was submitted. Could the facility mention that the majority of the risk was from a nearby gas station which is not unlike the average gas station?

DISTRICT RESPONSE

A facility may include in the notification package a District-approved site-specific informational letter that enhances the risk communication process. The optional facility letter may include a discussion of the risk assessment results, uncertainty and conservatism. This discussion should be brief, factual and not undermine the notification process. A discussion of minor errors (as opposed to uncertainties) that don't change public notification or risk reduction requirements would undermine the notification and likely will not be approved by the District. Any large errors that could potentially significantly change the results of the risk assessment should be corrected prior to notification. Discussion of the specific emission units which are responsible for the majority of the risk from the facility may be allowed. However, such specific information could be confusing and may be of limited value to most people. This type of emission unit-specific information should be provided if requested by an interested party.

56. WRITTEN COMMENT

It will be difficult to anticipate the concerns of the public so they can be addressed in a pre-approved HRA summary. The summary should be prepared after comments are received from the public. In that case more time may be needed. It is very important that public questions be addressed as soon as possible.

DISTRICT RESPONSE

Many public concerns and questions can be anticipated and addressed in the pre-approved health risk assessment summary. The District is available to assist in preparing the summary. Public questions directed to the facility that are not addressed by the summary should be responded to as soon as possible. A copy of the response should be sent to the District but such individual responses do not need to be pre-approved.

57. WRITTEN COMMENT

The District may want to include a way for the public to request a time and place for public meetings. The District may also want to require a different public meeting for each census tract or zip code region. Are follow-up meetings required?

DISTRICT RESPONSE

Rule 1210 requires that public meetings be located and scheduled in a manner that facilitates public attendance. If the response indicates the need for multiple meetings at different locations, those may be required. Having each individual indicate a meeting preference time would be unworkable. Facilities required to conduct a meeting should contact some of the persons expressing interest in a meeting in order to better decide on the meeting location, date and time. Follow-up meetings are

not required unless the facility is required to redo public notification annually or biennially and interest is again sufficient to warrant another public meeting.

58. WRITTEN COMMENT

Referring to Section (e)(1) of the proposed rule, the words "most recent" should be inserted between "source's" and "approved public health risk assessment".

DISTRICT RESPONSE

The District agrees. The rule has been changed as suggested.

59. WRITTEN COMMENT

How will the provisions of the risk reduction audit and plan be enforced? New permit conditions?

DISTRICT RESPONSE

Proposed Rule 1210 requires that the owner or operator implement the plan as determined complete by the District and in accordance with the schedule contained in the complete plan. If an owner or operator fails to do so, the owner or operator may be found in violation of Rule 1210 and subject to appropriate enforcement actions. In addition, the proposed rule requires that fully implemented risk reduction measures be made enforceable by the District through appropriate permit conditions.

60. WRITTEN COMMENT

The burden of proof should be on the facility to show that a shorter period for risk reduction is not called for by providing the information to the District required in Subsections (e)(3) and (e)(4). As written, the Air Pollution Control Officer would have to suspect that a shorter time would be feasible, and then request the necessary information from the facility. The District should require this information in the rule.

DISTRICT RESPONSE

The provision of the Health and Safety Code that authorizes the District to require a shorter time for risk reduction requires the District to find that such shorter period is technically feasible and economically practicable or that the facility emissions pose an unreasonable risk. If a facility's approved health risk assessment shows cancer risks above 250 in a million, or acute or chronic THI's above 10, the District will almost certainly request the information needed. If a facility's risks are below these levels but above the significant risk mitigation levels, the District will request this information if it believes that it is technically feasible to reduce risks within a shorter time than proposed in the facility's risk reduction audit and plan. However, not all facilities subject to risk reduction should be required to provide this information if it will not be relevant to whether their plan will be found complete.

61. WRITTEN COMMENT

Isn't return on equity (ROE) reported as a percent? In which case it may be less burdensome for a large corporation with a 1% ROE to pay for changes than a small operator with a 20% ROE? How will ROE be determined for non-profit or public organizations such as the Navy or public utilities?

DISTRICT RESPONSE

Return on equity is calculated as a percent. Return on equity is used to determine economic practicability which is a factor considered in establishing the timetable for reduction of risks to levels below the significant risk level. Economic practicability is defined as a cost for airborne toxic risk reduction measures, necessary to meet the public health risk levels of Subsection (e)(3)(i), which does not exceed 10 percent of the preceding five year average return on equity for the owner or operator whichever has the higher average annual return on equity. Evaluating costs as a percentage of the return on equity is an appropriate measure of economic practicability because it considers a facility's relative ability to absorb the costs of emission control. The higher a facility's return on equity, the more resources it will have available for risk reduction without resulting in financial hardship.

Many public organizations, such as a Navy facility or a public utility (that is not a corporation), will have financial records that indicate revenues (funding), expenditures, fund balance and assets. This information can be used to develop a value similar to a return on equity. This information will be considered in determining whether such an organization should be required to implement risk reduction measures in a shorter or longer time period. However, the feasibility of a government agency to pay for risk reduction measures within a given time period depends not only on the availability of funds but also the process for approval of the use of such funds.

62. WRITTEN COMMENT

The required contents of the risk reduction audit and plan imply a top-down selection approach. Feasibility should therefore consider safety concerns as well. The criteria should parallel the Best Available Control Technology criteria.

DISTRICT RESPONSE

The top-down approach in determining Best Available Control Technology is based on cost-effectiveness in dollars per pound of emissions controlled. The risk reduction audit and plan does not require a similar top-down analysis since the cost per pound of emissions controlled is not a consideration in whether a risk reduction audit and plan is complete. The risk reduction measures are those which the owner or operator proposes to meet the facility risk reduction requirements of the rule. Therefore, the owner or operator should consider safety concerns in determining the technical feasibility of the risk reduction measures that are proposed.

63. WRITTEN COMMENT

Could a risk reduction measure lead to an increase in emissions of criteria pollutants. If so, how will these be handled? Will this be a consideration in the feasibility of a measure? If offsets would be required but are not available, could this be a reason for a delay in the implementation of a plan?

DISTRICT RESPONSE

It is possible that a risk reduction measure could cause an increase in the emissions of a criteria air contaminant. Such emission increases would be subject to review under the District's New Source Review (NSR) rules. NSR requirements might include the incorporation of BACT in the design of the emission control device or process change. An air quality impact analysis might also be required. Currently, emission offsets might be required. However, the District is considering revisions to the NSR rules which, if approved, would exempt such projects from California offset requirements.

64. WRITTEN COMMENT

Notification of the public on the risk reduction audit and plan should be after the District has reviewed and approved the plan.

DISTRICT RESPONSE

Because the facilities required to submit risk reduction audits and plans will have recently completed public notification under Rule 1210, it is appropriate to notify interested members of the public as soon as possible that a risk reduction plan has been submitted and is available for review and comment. The District can then consider any public comments on the plan before making a determination of whether the plan is complete and meets the requirements of Rule 1210.

65. WRITTEN COMMENT

If a significant source of toxic emissions does not have a permit, will it be required to obtain a permit for the sole purpose of the modification to reduce risks.

DISTRICT RESPONSE

If an emission unit, that is not otherwise required to have a District permit, is controlled or modified in order to reduce toxic air contaminant emissions as part of a risk reduction measure, it will be required to obtain a District permit once the measure is fully implemented. This is to ensure the District has the ability to effectively enforce the risk reduction measure through specific permit terms and conditions. The District may propose a change to Rule 11 to allow a permit to be required in such case.