

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

(Adopted & Effective 6/12/96)

(Tables I, II, III-Toxic Air Contaminants: Rev. Effective 7/11/17)

(Table II-Toxic Air Contaminants: Rev. Effective 7/19/18)

(Table I-Toxic Air Contaminants: Rev. Effective 5/29/19)

(Tables II, III-Toxic Air Contaminants: Rev. Effective 9/29/20)

(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 non-cancer 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 June 12, 1996, and

(ii) Demonstrated, by July 29, 1996, 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 July 29, 1996, 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 June 27, 1996, 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 August 26, 1996, 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 Response 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 noncancer 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.

(iv) 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 non-cancer 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 For Which Potential Carcinogenic Impacts Must Be Calculated<sup>a</sup>**

<b>COMPOUND</b>	<b>CAS #<sup>b</sup></b>	<b>Date Added</b>
Acetaldehyde	75-07-0	6/12/1996
Acetamide	60-35-5	1/11/2001
Acrylamide	79-06-1	6/12/1996
Acrylonitrile	107-13-1	6/12/1996
Allyl chloride	107-05-1	1/11/2001
2-Aminoanthraquinone	117-79-3	1/11/2001
Aniline	62-53-3	1/11/2001
Arsenic (inorganic) and compounds	7440-38-2	6/12/1996
Asbestos	1332-21-4	6/12/1996
Benzene	71-43-2	6/12/1996
Benzidine (and its salts) as follows:	92-87-5	6/12/1996
Benzidine based dyes	1020	6/12/1996
Direct Black 38	1937-37-7	6/12/1996
Direct Blue 6	2602-46-2	6/12/1996
Direct Brown 95 (technical grade)	16071-86-6	6/12/1996
Benzyl chloride	100-44-7	1/11/2001
Beryllium and compounds	7440-41-7	6/12/1996
Bis (2-chloroethyl) ether (Dichloroethyl ether)	111-44-4	1/11/2001
Bis (chloromethyl) ether	542-88-1	1/11/2001
Potassium Bromate	7758-01-2	1/11/2001
1,3-Butadiene	106-99-0	6/12/1996
Cadmium and compounds	7440-43-9	6/12/1996
Carbon tetrachloride (tetrachloromethane)	56-23-5	6/12/1996
Chlorinated Paraffins	108171-26-2	1/11/2001
4-Chloro-o-phenylenediamine	95-83-0	1/11/2001
Chloroform	67-66-3	6/12/1996
Chlorophenols as follows:	N/A	6/12/1996
Pentachlorophenol	87-86-5	6/12/1996
2, 4, 6 - trichlorophenol	88-06-2	6/12/1996
P-chloro-o-toluidine	95-69-2	1/11/2001
Chromium (hexavalent) and compounds including, but not limited to:	18540-29-9	6/12/1996
Barium chromate	10294-40-3	6/12/1996
Calcium chromate	13765-19-0	6/12/1996
Lead chromate	7758-97-6	6/12/1996
Sodium dichromate	10588-01-9	6/12/1996
Strontium chromate	7789-06-2	6/12/1996
Chromium trioxide (as chromic acid mist)	1333-82-0	6/12/1996
P-cresidine	120-71-8	1/11/2001
Cupferron	135-20-6	1/11/2001
2,4-diaminoanisole	615-05-4	1/11/2001
2,4-diaminotoluene	95-80-7	1/11/2001
1,2-dibromo-3-chloropropane (DBCP)	96-12-8	6/12/1996
P-dichlorobenzene	106-46-7	6/12/1996
3,3-dichlorobenzidine	91-94-1	6/12/1996

**Table I - continued**

**Toxic Air Contaminants For Which Potential Carcinogenic Impacts Must Be Calculated<sup>a</sup>**

<b>COMPOUND</b>	<b>CAS # <sup>b</sup></b>	<b>Date Added</b>
1,1-dichloroethane (ethylidene dichloride)	75-34-3	1/11/2001
Di (2-ethylhexyl) phthalate (DEHP)	117-81-7	6/12/1996
P-dimethylaminoazobenzene	60-11-7	1/11/2001
2,4-dinitrotoluene	121-14-2	1/11/2001
1,4-dioxane (1,4-diethylene dioxide)	123-91-1	6/12/1996
Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	6/12/1996
Ethyl benzene	100-41-4	11/14/2007
Ethylene dibromide (1, 2 - dibromoethane)	106-93-4	6/12/1996
Ethylene dichloride (1, 2 – dichloroethane)	107-06-2	6/12/1996
Ethylene oxide (1,2-epoxyethane)	75-21-8	6/12/1996
Ethylene thiourea	96-45-7	1/11/2001
Formaldehyde	50-00-0	6/12/1996
Hexachlorobenzene	118-74-1	6/12/1996
Hexachlorocyclohexanes (mixed or technical grade)	608-73-1	6/12/1996
Alpha - hexachlorocyclohexane	319-84-6	6/12/1996
Beta - hexachlorocyclohexane	319-85-7	6/12/1996
Gamma - hexachlorocyclohexane (Lindane)	58-89-9	6/12/1996
Hydrazine	302-01-2	6/12/1996
Lead (inorganic) and compounds including, but not limited to:	7439-92-1	1/11/2001
Lead acetate	301-04-2	1/11/2001
Lead phosphate	7446-27-7	1/11/2001
Lead subacetate	1335-32-6	1/11/2001
Methyl tertiary-butyl ether	1634-04-4	1/11/2001
4,4'-methylene bis (2-chloroaniline) (MOCA)	101-14-4	1/11/2001
Methylene chloride (dichloromethane)	75-09-2	6/12/1996
4,4'-Methylene dianiline (and its dichloride)	101-77-9	1/11/2001
Michler's Ketone (4,4'-Bis (dimethylamino) benzophenone)	90-94-8	1/11/2001
N-nitrosodi-n-butylamine	924-16-3	6/12/1996
N-nitrosodi-n-propylamine	621-64-7	6/12/1996
N-nitrosodiethylamine	55-18-5	6/12/1996
N-nitrosodimethylamine	62-75-9	6/12/1996
N-nitrosodiphenylamine	86-30-6	1/11/2001
N-nitroso-n-methylethylamine	10595-95-6	6/12/1996
N-nitrosomorpholine	59-89-2	6/12/1996
N-nitrosopiperidine	100-75-4	6/12/1996
N-nitrosopyrrolidine	930-55-2	6/12/1996
Naphthalene	91-20-3	8/03/2004
Nickel and compounds including, but not limited to:	7440-02-0	6/12/1996
Nickel acetate	373-02-4	6/12/1996
Nickel carbonate	3333-67-3	6/12/1996
Nickel carbonyl	13463-39-3	6/12/1996
Nickel hydroxide	12054-48-7	6/12/1996
Nickelocene	1271-28-9	6/12/1996
Nickel oxide	1313-99-1	6/12/1996

**Table I – continued**

**Toxic Air Contaminants For Which Potential Carcinogenic Impacts Must Be Calculated<sup>a</sup>**

<b>COMPOUND</b>	<b>CAS # <sup>b</sup></b>	<b>Date Added</b>
Nickel refinery dust from the pyrometallurgical process	1146	6/12/1996
Nickel subsulfide	12035-72-2	6/12/1996
p-Nitrosodiphenylamine	156-10-5	6/12/1996
Particulate emissions from diesel-fueled engines	9901	9/15/2000
Perchloroethylene (tetrachloroethylene)	127-18-4	6/12/1996
Polychlorinated biphenyls (PCBs) unspciated mixtures	1336-36-3	6/12/1996
Polychlorinated biphenyls (PCBs) spciated as follows:	N/A	
3,3',4,4'-tetrachlorobiphenyl	32598-13-3	8/29/2003
3,4,4',5-tetrachlorobiphenyl	70362-50-4	8/29/2003
2,3,3',4,4'-pentachlorobiphenyl	32598-14-4	8/29/2003
2,3,4,4',5-pentachlorobiphenyl	74472-37-0	8/29/2003
2,3',4,4',5-pentachlorobiphenyl	31508-00-6	8/29/2003
2,3',4,4',5'-pentachlorobiphenyl	65510-44-3	8/29/2003
3,3',4,4',5-pentachlorobiphenyl	57465-28-8	8/29/2003
2,3,3',4,4',5-hexachlorobiphenyl	38380-08-4	8/29/2003
2,3,3',4,4',5'-hexachlorobiphenyl	69782-90-7	8/29/2003
2,3',4,4',5,5'-hexachlorobiphenyl	52663-72-6	8/29/2003
3,3',4,4',5,5'-hexachlorobiphenyl	32774-16-6	8/29/2003
2,3,3',4,4',5,5'-heptachlorobiphenyl	39635-31-9	8/29/2003
Polychlorinated dibenzo-p-dioxins (PCDD) as follows:	1086	6/12/1996
2,3,7,8-tetrachlorodibenzo-p-dioxin	1746-01-6	6/12/1996
1,2,3,7,8-pentachlorodibenzo-p-dioxin	40321-76-4	6/12/1996
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	39227-28-6	6/12/1996
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	57653-85-7	6/12/1996
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	19408-74-3	6/12/1996
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	35822-46-9	6/12/1996
1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin	3268-87-9	6/12/1996
Polychlorinated dibenzofurans (PCDF) as follows:	1080	6/12/1996
2,3,7,8-tetrachlorodibenzofuran	5120-73-19	6/12/1996
1,2,3,7,8-pentachlorodibenzofuran	57117-41-6	6/12/1996
2,3,4,7,8-pentachlorodibenzofuran	57117-31-4	6/12/1996
1,2,3,4,7,8-hexachlorodibenzofuran	70648-26-9	6/12/1996
1,2,3,6,7,8- hexachlorodibenzofuran	57117-44-9	6/12/1996
1,2,3,7,8,9- hexachlorodibenzofuran	72918-21-9	6/12/1996
2,3,4,6,7,8-hexachlorodibenzofuran	60851-34-5	6/12/1996
1,2,3,4,6,7,8-heptachlorodibenzofuran	67562-39-4	6/12/1996
1,2,3,4,7,8,9-heptachlorodibenzofuran	55673-89-7	6/12/1996
1,2,3,4,6,7,8,9-octachlorodibenzofuran	39001-02-0	6/12/1996
Polycyclic Aromatic Hydrocarbon (PAH) as follows:	1151	6/12/1996
Benz[a]anthracene	56-55-3	6/12/1996
Benzo[a]pyrene	50-32-8	6/12/1996
Benzo[b]fluoranthene	205-99-2	6/12/1996
Benzo[j]fluoranthene	205-82-3	6/12/1996
Benzo[k]fluoranthene	207-08-9	6/12/1996
Chrysene	218-01-9	6/12/1996

**Table I - continued**

**Toxic Air Contaminants For Which Potential Carcinogenic Impacts Must Be Calculated<sup>a</sup>**

COMPOUND	CAS # <sup>b</sup>	Date Added
Dibenz[a,h]acridine	226-36-8	6/12/1996
Dibenz[a,j]acridine	224-42-0	6/12/1996
Dibenz[a,h]anthracene	53-70-3	6/12/1996
Dibenzo[a,e]pyrene	192-65-4	6/12/1996
Dibenzo[a,h]pyrene	189-64-0	6/12/1996
Dibenzo[a,i]pyrene	189-55-9	6/12/1996
Dibenzo[a,l]pyrene	191-30-0	6/12/1996
7h-dibenzo[c,g]carbazole	194-59-2	6/12/1996
7,12-dimethylbenz[a]anthracene	57-97-6	6/12/1996
1,6-dinitropyrene	42397-64-8	6/12/1996
1,8-dinitropyrene	42397-65-9	6/12/1996
Indeno[1,2,3-c,d]pyrene	193-39-5	6/12/1996
3-methylcholanthrene	56-49-5	6/12/1996
5-methylchrysene	3697-24-3	6/12/1996
Naphthalene	91-20-3	8/03/2004
5-nitroacenaphthene	602-87-9	6/12/1996
6-nitrochrysene	7496-02-8	6/12/1996
2-nitrofluorene	607-57-8	6/12/1996
1-nitropyrene	5522-43-0	6/12/1996
4-nitropyrene	57835-92-4	6/12/1996
1,3-propane sultone	1120-71-4	1/11/2001
Propylene oxide	75-56-9	6/12/1996
Tertiary butyl-acetate (TBAC)	540-88-5	5/29/2019
1,1,2,2-tetrachloroethane	79-34-5	1/11/2001
Thioacetamide	62-55-5	6/12/1996
Toluene diisocyanates including, but not limited to:	26471-62-5	1/11/2001
Toluene-2,4-diisocyanate	584-84-9	1/11/2001
Toluene-2,6-diisocyanate	91-08-7	1/11/2001
1,1,2-Trichloroethane (vinyl trichloride)	79-00-5	1/11/2001
Trichlorethylene	79-01-6	6/12/1996
Urethane (ethyl carbamate)	51-79-6	6/12/1996
Vinyl chloride (chloroethylene)	75-01-4	6/12/1996

- a. Unit Risk Values shall be obtained from the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993 or any health risk assessment guidelines adopted by the state Office of Environmental Health Hazard Assessment (OEHHA), pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993. Table I was last revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(18) on May 29, 2019.
- b. Chemical Abstract Service Number (CAS): For chemical groupings and mixtures where a CAS number is not applicable, the 4-digit code used in the Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines (EICG) Report is listed. For information on the origin and use of the 4-digit code, see the EICG report.

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

<b>COMPOUND</b>	<b>CAS #<sup>b</sup></b>	<b>Date Added</b>
Acetaldehyde	75-07-0	6/12/1996
Acrolein	107-02-8	1/11/2001
Acrylonitrile	107-13-1	6/12/1996
Ammonia	7664-41-7	6/12/1996
Arsenic (inorganic) and compounds including, but not limited to:	7440-38-2	6/12/1996
Arsine	7784-42-1	6/12/1996
Benzene	71-43-2	6/12/1996
Beryllium and compounds	7440-41-7	6/12/1996
1,3-butadiene	106-99-0	1/11/2001
Cadmium and compounds	7440-43-9	6/12/1996
Caprolactam	105-60-2	6/16/2014
Carbon disulfide	75-15-0	1/11/2001
Carbon tetrachloride (tetrachloromethane)	56-23-5	6/12/1996
Carbonyl sulfide	463-58-1	7/11/17
Chlorine	7782-50-5	6/12/1996
Chlorine dioxide	10049-04-4	1/11/2001
Chlorobenzene	108-90-7	6/12/1996
Chloroform	67-66-3	6/12/1996
Chloropicrin	76-06-2	6/12/1996
Chromium (hexavalent) and compounds including, but not limited to:	18540-29-9	6/12/1996
Barium chromate	10294-40-3	6/12/1996
Calcium chromate	13765-19-0	6/12/1996
Lead chromate	7758-97-6	6/12/1996
Sodium dichromate	10588-01-9	6/12/1996
Strontium chromate	7789-06-2	6/12/1996
Chromium trioxide (as chromic acid mist)	1333-82-0	3/12/2001
Cresols (mixtures of)	1319-77-3	6/12/1996
m-cresol	108-39-4	6/12/1996
o-cresol	95-48-7	6/12/1996
p-cresol	106-44-5	6/12/1996
Cyanide (inorganic)	57-12-5	1/11/2001
Hydrogen cyanide (hydrocyanic acid)	74-90-8	6/12/1996
P – dichlorobenzene (1,4-dichlorobenzene)	106-46-7	6/12/1996
Diethanolamine	111-42-2	1/14/2002
N,n-dimethyl formamide	68-12-2	1/11/2001
1,4-dioxane	123-91-1	6/12/1996
Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	6/12/1996
1,2-epoxybutane	106-88-7	1/11/2001
Ethyl benzene	100-41-4	1/11/2001
Ethyl chloride	75-00-3	6/12/1996
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	6/12/1996
Ethylene dichloride (1,2-Dichloroethane)	107-06-2	6/12/1996
Ethylene glycol	107-21-1	6/12/1996
Ethylene oxide	75-21-8	6/12/1996

**Table II – continued**

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

<b>COMPOUND</b>	<b>CAS #<sup>b</sup></b>	<b>Date Added</b>
Fluorides and Compounds	1101	1/11/2001
Hydrogen fluoride (hydrofluoric acid)	7664-39-3	6/12/1996
Formaldehyde	50-00-0	6/12/1996
Glutaraldehyde	111-30-8	6/12/1996
Glycol Ethers as follows:	N/A	6/12/1996
Ethylene glycol butyl ether – EGBE	111-76-2	7/19/2018
Ethylene glycol ethyl ether – EGEE	110-80-5	6/12/1996
Ethylene glycol ethyl ether acetate – EGEEA	111-15-9	6/12/1996
Ethylene glycol methyl ether – EGME	109-86-4	6/12/1996
Ethylene glycol methyl ether acetate – EGMEA	110-49-6	6/12/1996
1,6-hexamethylene diisocyanate (monomer)	822-06-0	9/29/2020
n-Hexane	110-54-3	1/11/2001
Hydrazine	302-01-2	6/12/1996
Hydrochloric acid	7647-01-0	6/12/1996
Hydrogen sulfide	7783-06-4	6/12/1996
Isophorone	78-59-1	1/14/2002
Isopropyl alcohol (Isopropanol)	67-63-0	1/11/2001
Maleic anhydride	108-31-6	6/12/1996
Manganese	7439-96-5	6/12/1996
Mercury (inorganic) and compounds including, but not limited to:	7439-97-6	6/12/1996
Mercuric chloride	7487-94-7	6/12/1996
Methanol	67-56-1	6/12/1996
Methyl bromide (Bromomethane)	74-83-9	6/12/1996
Methyl tert-butyl ether	1634-04-4	1/11/2001
Methyl chloroform (1, 1, 1 – TCA)	71-55-6	6/12/1996
Methyl isocyanate	624-83-9	6/12/1996
Methylene chloride (Dichloromethane)	75-09-2	6/12/1996
4,4'-methylene dianiline (and its dichloride)	101-77-9	6/12/1996
Methylene diphenyl diisocyanate (Polymeric)	101-68-8	6/12/1996
Naphthalene	91-20-3	6/12/1996
Nickel and compounds including, but not limited to:	7440-02-0	6/12/1996
Nickel acetate	373-02-4	6/12/1996
Nickel carbonate	3333-67-3	6/12/1996
Nickel carbonyl	13463-39-3	6/12/1996
Nickel hydroxide	12054-48-7	6/12/1996
Nickelocene	1271-28-9	6/12/1996
Nickel oxide	1313-99-1	6/12/1996
Nickel refinery dust from the pyrometallurgical process	1146	6/12/1996
Nickel subsulfide	12035-72-2	6/12/1996
Particulate emissions from diesel-fueled engines	9901	9/15/2000
Perchloroethylene (Tetrachloroethylene)	127-18-4	6/12/1996
Phenol	108-95-2	6/12/1996
Phosphine	7803-51-2	6/12/1996
Phosphoric acid	7664-38-2	6/12/1996
Phthalic anhydride	85-44-9	6/12/1996

**Table II – continued**

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

<b>COMPOUND</b>	<b>CAS #<sup>b</sup></b>	<b>Date Added</b>
Polychlorinated biphenyls (PCBs) speciated as follows:	N/A	
3,3',4,4'-tetrachlorobiphenyl	32598-13-3	8/29/2003
3,4,4',5-tetrachlorobiphenyl	70362-50-4	8/29/2003
2,3,3',4,4'-pentachlorobiphenyl	32598-14-4	8/29/2003
2,3,4,4',5-pentachlorobiphenyl	74472-37-0	8/29/2003
2,3',4,4',5-pentachlorobiphenyl	31508-00-6	8/29/2003
2,3',4,4',5'-pentachlorobiphenyl	65510-44-3	8/29/2003
3,3',4,4',5-pentachlorobiphenyl	57465-28-8	8/29/2003
2,3,3',4,4',5-hexachlorobiphenyl	38380-08-4	8/29/2003
2,3,3',4,4',5'-hexachlorobiphenyl	69782-90-7	8/29/2003
2,3',4,4',5,5'-hexachlorobiphenyl	52663-72-6	8/29/2003
3,3',4,4',5,5'-hexachlorobiphenyl	32774-16-6	8/29/2003
2,3,3',4,4',5,5'-heptachlorobiphenyl	39635-31-9	8/29/2003
Polychlorinated dibenzo-p-dioxins (PCDD) as follows:	1086	6/12/1996
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	6/12/1996
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	6/12/1996
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	6/12/1996
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	6/12/1996
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	6/12/1996
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	6/12/1996
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	6/12/1996
Polychlorinated dibenzofurans (PCDF) as follows:	1080	6/12/1996
2,3,7,8-Tetrachlorodibenzofuran	5120-73-19	6/12/1996
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	6/12/1996
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6/12/1996
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	6/12/1996
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	6/12/1996
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	6/12/1996
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	6/12/1996
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	6/12/1996
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	6/12/1996
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	6/12/1996
Propylene (propene)	115-07-1	1/11/2001
Propylene glycol monomethyl ether	107-98-2	6/12/1996
Propylene oxide	75-56-9	6/12/1996
Selenium including, but not limited to:	7782-49-2	6/12/1996
Selenium sulfide	7446-34-6	6/12/1996
Silica (crystalline, respirable)	1175	10/11/2013
Styrene	100-42-5	6/12/1996
Sulfuric acid	7664-93-9	7/11/17
Sulfur trioxide	7446-71-9	7/11/17
Toluene	108-88-3	6/12/1996
Toluene diisocyanates	26471-62-5	6/12/1996
Toluene-2,4-diisocyanate	584-84-9	6/12/1996
Toluene-2,6-diisocyanate	91-08-7	6/12/1996
Trichloroethylene	79-01-6	6/12/1996

**Table II – continued**

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

<b>COMPOUND</b>	<b>CAS #<sup>b</sup></b>	<b>Date Added</b>
Triethylamine	121-44-8	1/11/2001
Vinyl acetate	108-05-4	1/11/2001
Vinylidene chloride	75-35-4	6/12/1996
Xylenes (mixed isomers)	1330-20-7	6/12/1996
m-Xylene	108-38-3	6/12/1996
o-Xylene	95-47-6	6/12/1996
p-Xylene	106-42-3	6/12/1996

- a. Reference Exposure Levels (RELs) and toxic endpoint information shall be obtained from the CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993 or any health risk assessment guidelines adopted by the state Office of Environmental Health Hazard Assessment (OEHHA), pursuant to Division 26, Part 6, Chapter 6 of the California Health and Safety Code (SB 1731 program), that replace all or part of such CAPCOA Air Toxics Hot Spots Program Risk Assessment Guidelines, October 1993. Table II was last revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(18) on September 29, 2020.
- b. Chemical Abstract Service Number (CAS): For chemical groupings and mixtures where a CAS number is not applicable, the 4-digit code used in the Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines (EICG) Report is listed. For information on the origin and use of the 4-digit code, see the EICG report.



**Table III****Toxic Air Contaminants For Which Potential Acute Noncancer Impacts Must Be Calculated<sup>a</sup>**

<b>COMPOUND</b>	<b>CAS # <sup>b</sup></b>	<b>Date Added</b>
Acetaldehyde	75-07-0	1/28/2009
Acrolein	107-02-8	1/11/2001
Acrylic acid	79-10-7	1/11/2001
Ammonia	7664-41-7	6/12/1996
Arsenic (inorganic) and compounds including, but not limited to:	7440-38-2	6/12/1996
Arsine	7784-42-1	6/12/1996
Benzene	71-43-2	6/12/1996
Benzyl chloride	100-44-7	6/12/1996
1,3-butadiene	106-99-0	10/11/2013
Caprolactam	105-60-2	6/16/2014
Carbon disulfide	75-15-0	1/11/2001
Carbon monoxide	630-08-0	1/11/2001
Carbon tetrachloride (tetrachloromethane)	56-23-5	6/12/1996
Carbonyl sulfide	463-58-1	7/11/17
Chlorine	7782-50-5	6/12/1996
Chloroform	67-66-3	6/12/1996
Chloropicrin	76-06-2	1/11/2001
Copper and compounds	7440-50-8	6/12/1996
Cyanide (inorganic)	57-12-5	6/12/1996
Hydrogen cyanide (hydrocyanic acid)	74-90-8	6/12/1996
1,4-Dioxane (1,4-diethylene dioxide)	123-91-1	6/12/1996
Epichlorohydrin (1-chloro-2,3-epoxypropane)	106-89-8	1/11/2001
Fluorides and Compounds	1101	6/12/1996
Hydrogen fluoride (hydrofluoric acid)	7664-39-3	6/12/1996
Formaldehyde	50-00-0	6/12/1996
Glycol ethers as follows:	N/A	6/12/1996
Ethylene glycol butyl ether - EGBE	111-76-2	6/12/1996
Ethylene glycol ethyl ether - EGEE	110-80-5	6/12/1996
Ethylene glycol ethyl ether acetate - EGEEA	111-15-9	6/12/1996
Ethylene glycol methyl ether - EGME	109-86-4	6/12/1996
1,6-hexamethylene diisocyanate (monomer)	822-06-0	9/29/2020
Hydrochloric acid (hydrogen chloride)	7647-01-0	6/12/1996
Hydrogen selenide	7783-07-5	6/12/1996
Hydrogen sulfide	7783-06-4	6/12/1996
Isopropyl alcohol (isopropanol)	67-63-0	1/11/2001
Mercury (inorganic) and compounds including, but not limited to:	7439-97-6	6/12/1996
Mercuric chloride	7487-94-7	6/12/1996
Methanol	67-56-1	1/11/2001
Methyl bromide (bromomethane)	74-83-9	6/12/1996
Methyl chloroform (1,1,1-trichloroethane)	71-55-6	6/12/1996
Methyl ethyl ketone (2-butanone)	78-93-3	1/11/2001
Methylene chloride (dichloromethane)	75-09-2	6/12/1996
Methylene diphenyl diisocyanate (Polymeric)	101-68-8	6/14/2016

**Table III - continued**

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

<b>COMPOUND</b>	<b>CAS # <sup>b</sup></b>	<b>Date Added</b>
Nickel and compounds including, but not limited to:	7440-02-0	6/12/1996
Nickel acetate	373-02-4	6/12/1996
Nickel carbonate	3333-67-3	6/12/1996
Nickel carbonyl	13463-39-3	6/12/1996
Nickel hydroxide	12054-48-7	6/12/1996
Nickelocene	1271-28-9	6/12/1996
Nickel oxide	1313-99-1	6/12/1996
Nickel refinery dust from the pyrometallurgical process	1146	6/12/1996
Nickel subsulfide	12035-72-2	6/12/1996
Nitric acid	7697-37-2	1/11/2001
Nitrogen dioxide	10102-44-0	6/12/1996
Ozone	10028-15-6	6/12/1996
Perchloroethylene (tetrachloroethylene)	127-18-4	6/12/1996
Phenol	108-95-2	1/11/2001
Phosgene	75-44-5	6/12/1996
Propylene oxide	75-56-9	6/12/1996
Sodium hydroxide	1310-73-2	6/12/1996
Styrene	100-42-5	1/11/2001
Sulfates	9960	6/12/1996
Sulfur dioxide	7446-09-5	6/12/1996
Sulfuric acid and oleum	N/A	6/12/1996
Sulfuric acid	7664-93-9	6/12/1996
Sulfur trioxide	7446-71-9	6/12/1996
Oleum	8014-95-7	6/12/1996
Toluene	108-88-3	1/11/2001
Toluene diisocyanates	26471-62-5	6/14/2016
Toluene-2,4-diisocyanate	584-84-9	6/14/2016
Toluene-2,6-diisocyanate	91-08-7	6/14/2016
Triethylamine	121-44-8	1/11/2001
Vanadium (fume or dust)	7440-62-2	1/11/2001
Vanadium pentoxide	1314-62-1	1/11/2001
Vinyl chloride (chloroethylene)	75-01-4	1/11/2001
Xylenes (mixed isomers)	1330-20-7	6/12/1996
m-Xylene	108-38-3	6/12/1996
o-Xylene	95-47-6	6/12/1996
p-Xylene	106-42-3	6/12/1996

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