

**RULE 1210. TOXIC AIR CONTAMINANT HEALTH RISKS –  
PUBLIC NOTIFICATION AND RISK REDUCTION**  
(Rev. Adopted & Effective *(date of adoption)*)  
(Table I - Toxic Air Contaminants: Rev. Effective *(date of adoption)*)  
(Table II - Toxic Air Contaminants: Rev. Effective *(date of adoption)*)  
(Table III - Toxic Air Contaminants: Rev. Effective *(date of adoption)*)

PURPOSE: The purpose of this rule is to reduce the health risk associated with emissions of toxic air contaminants from existing stationary sources by specifying limits for maximum individual cancer risk, cancer burden, and total acute and chronic noncancer health hazard indexes applicable to total stationary source emissions and by requiring stationary sources to implement public notifications and health risk reduction plans, and conduct public meetings, to achieve specified health risk limits, as required by the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) and this rule.

**(a) APPLICABILITY**

This rule is applicable to each existing stationary source required to prepare a health risk assessment under the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) pursuant to Section 44360 of the California Health and Safety Code.

**(b) EXEMPTIONS**

The provisions of Section (d) Public Notification and Public Meeting Requirements and Section (e) Risk Reduction Audits and Plans shall not apply to stationary sources for which industry-wide health risk assessments are prepared by the Air Pollution Control Officer pursuant to Section 44323 of the California Health and Safety Code.

**(c) DEFINITIONS**

(1) **"Airborne Toxic Risk Reduction Measure(s)"** means control measures at a stationary source that reduce or eliminate toxic air contaminant emissions and associated health risks, whose reductions are real, permanent, quantifiable, and enforceable through District permits or permit conditions. Airborne toxic risk reduction measures may include changes in production processes, feed stock modifications, product reformulations, production system modifications, system enclosures or relocations within the facility, 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) **“Best Available Retrofit Control Technology for Toxics (T-BARCT)”** means the most effective emission limitation, or retrofit emission control device or control technique, which:

(i) has been achieved in practice for that source or category of source; or

(ii) is any other emissions limitation or retrofit control technique found by the Air Pollution Control Officer to be technically feasible for that source or category of source, or for a specific source, while taking into consideration the cost of achieving health risk reductions, any non-air quality health and environmental impacts, and energy requirements. If there is an applicable MACT standard, the Air Pollution Control Officer shall evaluate it for equivalency with T-BARCT.

(3) **"Cancer Burden"** means the estimated increase in the occurrence of cancer cases in a population subject to an individual cancer risk of equal to or greater than one in one million resulting from exposure to toxic air contaminants.

(4) **"Economically Practicable"** means whether, and to what extent, the annualized cost of the airborne toxic risk reduction measures necessary to reduce the health risk to below the significant risk threshold(s) is not more than 10% of the annual profits of a facility or 1% of the annual operational budget of a non-profit facility.

(5) **"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.

(6) **"Emission Unit"** means the same as defined in Rule 2 – Definitions.

(7) **"Health Risk Assessment"** means a study to identify, characterize and quantify the estimated cancer and noncancer 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.

(8) **"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 acute health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(9) **"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 chronic health effect to the applicable reference exposure level for that contaminant for the same averaging time.

(10) **"Industry-Wide Health Risk Assessment"** means a study to identify, characterize, and quantify the 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 (SIC) Code.

(ii) Individual preparation of emission inventory reports and 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.

(11) "**Maximum Achievable Control Technology (MACT)**" means the same as defined in Rule 1200 – Toxic Air Contaminants – New Source Review.

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

(13) "**Risk Reduction Audit and Plan**" means a study prepared by the owner or operator, or representative, of a stationary source which identifies sources and emissions of toxic air contaminants at the stationary source that result in significant health risks and which proposes airborne toxic risk reduction measures that are sufficient to reduce health risks from such emissions to below the significant risk threshold(s).

(14) "**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.

(15) "**Sensitive Receptors**" include hospitals, schools, day care facilities, elderly housing and convalescent facilities and other facilities where the occupants are more susceptible to the adverse effects of exposure to toxic air contaminants, as determined by the Air Pollution Control Officer.

(16) "**Significant Risk Threshold**" means any of the following health risk levels:

(i) Maximum individual 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.

(17) "**Small Business**" means the same as defined in California Government Code Section 11342.610.

(18) **"Stationary Source"** means the same as defined in Rule 2 – Definitions.

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

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

(21) **"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).

The Air Pollution Control Officer may revise Tables I, II or III upon OEHHA adoption of any new or revised health standard 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 toxic air contaminants to these tables.

**(d) PUBLIC NOTIFICATION AND PUBLIC MEETING REQUIREMENTS**

(1) The owner or operator of each stationary source for which a health risk assessment has been approved by the Air Pollution Control Officer and which risk assessment indicates health risks at or above the significant risk threshold(s), shall provide written public notice of such risks and conduct a public meeting in accordance with the provisions of Subsections (d)(2) through (d)(11).

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.

(2) Within 30 days of the date of written notice from the Air Pollution Control Officer that public notification is required, 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. The proposed public notification letter shall also include information about the required public meeting, such as date and location

of the meeting.

(ii) Any proposed optional stationary source informational letter to accompany the public notification letter shall comply with the requirements of Subsection (d)(3)(iii).

(iii) The name, e-mail address, and phone number of the person(s) responsible for coordinating public notification and the public meeting 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 addresses to be included in the notification area.

(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 5% 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 15 days of receipt of the plan.

(3) Within 15 days of the date of written notice from the Air Pollution Control Officer of the approval of the public notification plan, the owner or operator of a stationary source shall implement the approved public notification plan. Each written public notice 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) An optional stationary source informational letter that has been approved by the Air Pollution Control Officer. The content of the optional stationary source informational letter shall be limited to the following:

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

(B) A discussion of steps taken by the stationary source to reduce emissions or health risks to the public.

(C) A brief and factual discussion of the health risk assessment results and the health protective assumptions of the health risk assessment.

(D) The name, e-mail address, and phone number of the stationary source contact(s) regarding the public notification, the public meeting, and the health risk assessment.

(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) For each public notification directed to a school, a request that the administrator of the school, or an assignee of the administrator, distribute notices provided by the owner or operator of a stationary source to the parents or guardians of students attending the school. The cost of such distribution shall be paid by the owner or operator of a stationary source.

(vi) At the option of the owner or operator, 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.

(4) Multilingual notifications shall be provided by the owner or operator of a stationary source if 5% 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 5% or more of the total persons to be notified in that census tract.

(5) Distribution of the public notice must be conducted by the U.S. Postal Service. The cost of distribution of the public notice shall be paid by the owner or operator of the stationary source.

(6) Each public notification shall be mailed in an envelope supplied by the Air Pollution Control Officer and addressed to "current resident" of private residences, businesses, or sensitive receptors.

(7) If the owner or operator of a stationary source fails to carry out the public notification requirements, 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.

(8) The owner or operator of a stationary source shall provide public notification annually, in accordance with the procedures of this rule. The owner or operator may cease annual public notification upon demonstrating, to the satisfaction of the Air Pollution Control Officer, that health risks have been reduced to below the significant

risk threshold(s).

(9) Within 15 days of the date of distribution of public notification materials, the owner or operator of a stationary source shall submit to the Air Pollution Control Officer proof of distribution which shall include:

- (i) receipts from the U.S. Postal Service, which describe the boundaries of notification, and addresses included in the mailing, and
- (ii) a copy of all information provided by the owner or operator to the public pursuant to the notification requirements of this rule.

(10) Within 30 days of the public notification, the owner or operator of a stationary source shall conduct a public meeting, in coordination with the District, and shall:

- (i) Reserve a venue for the public meeting at a time that facilitates public attendance. The venue shall be located within, or if not feasible, nearby the notification area. A virtual public meeting may be conducted with approval from the Air Pollution Control Officer.
- (ii) Make all necessary arrangements for the meeting including, but not limited to, providing for audio visual equipment and personnel. Interpreters shall be present if a multilingual public notification is required pursuant to Subsection (d)(4).
- (iii) Attend the meeting to answer any questions related to the stationary source operations.
- (iv) Bear the costs, including District costs, of holding the meeting.

(11) The Air Pollution Control Officer, or designee, shall establish the agenda of the meeting, in collaboration with the owner or operator of the stationary source, and attend each public meeting to provide information regarding the Air Toxics Hot Spots Program and the results of the health risk assessment.

**(e) RISK REDUCTION AUDITS AND PLANS**

(1) Except as provided in Subsections (e)(2) and (e)(3), within 120 days of receipt of written notice from the Air Pollution Control Officer that a stationary source's most recent approved health risk assessment indicates health risks at or above the significant risk threshold(s), the owner or operator shall submit to the Air Pollution Control Officer, for review for completeness and approval, a risk reduction audit and plan.

The risk reduction audit and plan shall comply with the requirements of Subsection (e)(4) and shall contain airborne toxic risk reduction measures proposed by the owner or operator which will be sufficient to reduce the health risks to below the

significant risk threshold(s). Such risk reductions shall be accomplished within five years of the date the plan is submitted to the Air Pollution Control Officer.

(2) The Air Pollution Control Officer may shorten the period for an owner or operator of a stationary source to reduce risks to below the significant risk threshold(s) 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 individual cancer risks for exposed persons to below the significant risk threshold(s) in less than five years.

(ii) Whether the proposed airborne toxic risk reduction measures which could be implemented in less than 5 years are economically practicable.

(iii) 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.

(iv) Whether there are additional stationary sources required to reduce health risks pursuant to this Section (e) Risk Reduction Audits and Plans and for which there are approved health risk assessments indicating health risks at or above the significant risk threshold(s) for some or all of the same persons at risk by emissions from the stationary source under review.

(3) The Air Pollution Control Officer may allow additional time for an owner or operator of a stationary source to reduce risks to below the significant risk threshold(s). However, no extension of time may be granted unless the owner or operator has reduced the health risk from all emission units within the stationary source contributing to the exceedance of the significant risk threshold(s) to an extent that is technically feasible and economically practicable. The owner or operator shall submit an extension request to the Air Pollution Control Officer, in the manner and form prescribed by the Air Pollution Control Officer, which shall include all of the following:

(i) Demonstration that the health risks from all emission units within the stationary source contributing to the exceedance of the significant risk threshold(s) have been reduced to an extent that is technically feasible and economically practicable.

(ii) Supporting documentation to demonstrate that reducing risks to below the significant risk threshold(s) is not technically feasible or economically practicable for the stationary source.



(iii) A proposal demonstrating that T-BARCT has been installed on all emission units at the stationary source, where it is economically practicable.

The Air Pollution Control Officer may impose conditions on the approval of additional time, as necessary, to ensure that airborne toxic risk reduction measures that are technically feasible and economically practicable are implemented as expeditiously as possible.

This extension can only be granted by the Air Pollution Control Officer for up to 3 additional years. Additional extensions might be granted provided the requirements in this Subsection (e)(3) are met, as determined by the Air Pollution Control Officer.

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

(i) The name and location of the stationary source.

(ii) A facility risk characterization which includes an updated emission inventory report and health risk assessment, if the risk due to total facility emissions has increased to above or decreased to below the levels indicated in the previously approved health risk assessment.

(iii) The identification of all the emission unit(s) for which the owner or operator proposes to reduce toxic air contaminant emissions and the airborne toxic risk reduction measures proposed for implementation to reduce such emissions.

(iv) 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)(2) or (e)(3). 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.

(v) A demonstration, including supporting documentation such as emission calculations, 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 health risks from such emissions are below the significant risk threshold(s), or that all feasible measures will be implemented and T-BARCT will be installed as required by Subsection (e)(3). The demonstration shall be made through analogy with the approved 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 health risks resulting from such new or increased emissions during the period approved for implementation of the risk reduction audit and plan.

(vi) A schedule for providing progress reports on reductions in emissions of toxic air contaminants and estimated health risks achieved under the implemented plan. Progress reports shall be provided not less frequently than within a calendar year from when the plan is approved, and annually thereafter, and may be incorporated into emission inventory report updates required pursuant to Section 44344 of the California Health and Safety Code.

(5) 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) PROGRAM FEES**

All costs incurred by the Air Pollution Control Officer associated with the public notification, public meeting, 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 Subsection (f)(6) Toxic Hot Spots, of Rule 40 – Permit and Other Fees.

**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
Cobalt	7440-48-4	2/26/2021
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

**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>
3,3-dichlorobenzidine	91-94-1	6/12/1996
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

**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 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
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) 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
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

**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>
Chrysene	218-01-9	6/12/1996
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 any health risk assessment guidelines adopted by OEHHA. Table I was last revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(21) on *(date of adoption)*.
- 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 any health risk assessment guidelines adopted by OEHHA. Table II was last revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(21) on (*date of adoption*).
- 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>**

COMPOUND	CAS # <sup>b</sup>	Date Added
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

- a. Reference Exposure Levels (RELs) and toxic endpoint information shall be obtained from any health risk assessment guidelines adopted by OEHHA. Table III was last revised pursuant to Rule 1200(c)(23) and Rule 1210(c)(21) on *(date of adoption)*.
- 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.