

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**RULE 1401 - NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS**

*(Adopted June 1, 1990)(Amended December 7, 1990; July 10, 1998; January 8, 1999; March 12, 1999; August 13, 1999; March 17, 2000; August 18, 2000; June 15, 2001; May 3, 2002; February 7, 2003; May 2, 2003; March 4, 2005)*

(a) Purpose

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table I. The rule establishes allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

(b) Applicability

(1) Applications for new, relocated, and modified permit units which were received by the District on or after June 1, 1990 shall be subject to Rule 1401. Applications shall be subject to the version of Rule 1401 that is in effect at the time the application is deemed complete. Permit units installed without a required permit to construct shall be subject to this rule, if the application for a permit to operate such equipment was submitted after June 1, 1990.

(2) This rule shall apply to new, relocated, and modified equipment identified in Rule 219 as not requiring a written permit if the risk from the equipment will be greater than identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401.

(c) Definitions

(1) ACCEPTABLE STACK HEIGHT for a permit unit is defined as a stack height that does not exceed two and one half times the height of the permit unit or two and one half times the height of the building housing the permit unit, and shall not be greater than 65 meters (213 feet), unless the applicant demonstrates to the satisfaction of the Executive Officer that a greater height is necessary.

- (2) BEST AVAILABLE CONTROL TECHNOLOGY FOR TOXICS (T-BACT) means the most stringent emissions limitation or control technique which:
- (A) has been achieved in practice for such permit unit category or class of source; or
  - (B) is any other emissions limitation or control technique, including process and equipment changes of basic and control equipment, found by the Executive Officer to be technologically feasible for such class or category of sources, or for a specific source.
- (3) CANCER BURDEN means the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million ( $1.0 \times 10^{-6}$ ) resulting from exposure to toxic air contaminants.
- (4) CONTEMPORANEOUS RISK REDUCTION means any reduction in risk resulting from a decrease in emissions of toxic air contaminants at the facility that is permanent, real, quantifiable and enforceable through District permit conditions. Permit applications associated with the increase and decrease in risk must be submitted together and the reduction of risk must occur before the start of operation of the permit unit that will have an increased risk. A contemporaneous risk reduction shall be calculated based on the actual average annual emissions, as determined by facility records, and annual emissions declarations pursuant to Rule 301 as appropriate, or other data approved by the Executive Officer, whichever is less, which have occurred during the two-year period immediately preceding the date of application.
- (5) FACILITY means any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groupings, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Notwithstanding the above, sources or installations involved in crude oil and gas production in Southern California Coastal or OCS

Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.

- (6) INDIVIDUAL SUBSTANCE ACUTE HAZARD INDEX (HI) is the ratio of the estimated maximum one-hour concentration of a toxic air contaminant for a potential maximally exposed individual to its acute reference exposure level.
- (7) INDIVIDUAL SUBSTANCE CHRONIC HAZARD INDEX (HI) is the ratio of the estimated long-term level of exposure to a toxic air contaminant for a potential maximally exposed individual to its chronic reference exposure level. The chronic hazard index calculations shall include multipathway consideration, if applicable.
- (8) MAXIMUM INDIVIDUAL CANCER RISK (MICR) is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants over a period of 70 years for residential receptor locations. The MICR for worker receptor locations shall be calculated pursuant to the Risk Assessment Procedures referenced in subdivision (e). The MICR calculations shall include multipathway consideration, if applicable.
- (9) MODIFICATION means any physical change in, change in method of operation, or addition to an existing permit unit that requires an application for a permit to construct and/or operate. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment, unless previously limited by an enforceable permit condition, shall not include:
  - (A) an increase in the production rate, unless such increase will cause the maximum design capacity of the equipment to be exceeded; or
  - (B) an increase in the hours of operation; or
  - (C) a change in ownership of a source; or
  - (D) a change in formulation of the materials processed which will not result in a net increase of the MICR, cancer burden, or chronic or acute HI from the associated permit unit.

For facilities that have been issued a facility permit pursuant to Regulation XX or a Title V permit pursuant to Regulation XXX, modification means any physical change in, change in method of operation of, or addition to

an existing individual article, machine, equipment or other contrivance which would have required an application for a permit to construct and/or operate, were the unit not covered under a facility permit or Title V permit.

(10) PERMIT UNIT means any article, machine, equipment, or other contrivance, or combination thereof, which may cause or control the issuance of air contaminants, and which requires a written permit pursuant to Rules 201 and/or 203. For facilities that have been issued a facility permit or Title V permit, a permit unit for the purpose of this rule means any individual article, machine, equipment or other contrivance which may cause or control the issuance of air contaminants and which would require a written permit pursuant to Rules 201 and/or 203 if it was not covered under a facility permit or Title V permit. For publicly-owned sewage treatment operations, each process within multi-process permit units at the facility shall be considered a separate permit unit for purposes of this rule.

(11) RECEPTOR LOCATION means

(A) for the purpose of calculating acute HI, any location outside the boundaries of the facility at which a person could experience acute exposure; and

(B) for the purpose of calculating chronic HI and MICR, any location outside the boundaries of the facility at which a person could experience chronic exposure.

The Executive Officer shall consider the potential for exposure in determining whether the location will be considered a receptor location.

(12) RELOCATION means the removal of an existing permit unit from one parcel of land in the District and installation at another parcel of land where two parcels are not in actual physical contact and are not separated solely by a public roadway or other public right-of-way. The removal of a permit unit from one location within a facility and installation at another location within the facility is a relocation only if an increase in maximum individual cancer risk in excess of one in one million ( $1 \times 10^{-6}$ ) or a Hazard Index of 1.0 occurs at any receptor location.

(13) TOTAL ACUTE HAZARD INDEX (HI) is the sum of the individual substance acute HIs for all toxic air contaminants affecting the same target organ system.

- (14) TOTAL CHRONIC HAZARD INDEX (HI) is the sum of the individual substance chronic HIs for all toxic air contaminants affecting the same target organ system.
- (15) TOXIC AIR CONTAMINANT is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. For the purpose of this rule, toxic air contaminants are those listed in Table I.

(d) Requirements

The requirements of paragraphs (d)(2) and (d)(3) shall become effective September 8, 1998. The Executive Officer shall deny the permit to construct a new, relocated or modified permit unit if emissions of any toxic air contaminant listed in Table I may occur, unless the applicant has substantiated to the satisfaction of the Executive Officer all of the following:

(1) MICR and Cancer Burden

The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:

- (A) an increased MICR greater than one in one million ( $1.0 \times 10^{-6}$ ) at any receptor location, if the permit unit is constructed without T-BACT;
- (B) an increased MICR greater than ten in one million ( $1.0 \times 10^{-5}$ ) at any receptor location, if the permit unit is constructed with T-BACT;
- (C) a cancer burden greater than 0.5.

(2) Chronic Hazard Index

The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by OEHHA, unless paragraph (e)(3) applies, will not exceed 1.0 at any receptor location.

(3) Acute Hazard Index

The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete

on or after the date when the risk value for the compound is finalized by OEHHA, unless paragraph (e)(3) applies, will not exceed 1.0 at any receptor location.

(4) Risk Per Year

The risk per year shall not exceed 1/70 of the maximum allowable risk specified in (d)(1)(A) or (d)(1)(B) at any receptor locations in residential areas.

(5) If a permit contains operating conditions imposed pursuant to Rule 1401, which prohibit or limit the use or emission of toxic air contaminants, those conditions shall apply only to those toxic air contaminants listed in the version of Rule 1401 applicable at the time the permit conditions were imposed.

(6) Federal New Source Review for Toxics

Pursuant to Section 112(g) of the federal Clean Air Act (CAA), no person shall begin construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112 (b) of the CAA, unless the source is constructed with Best Available Control Technology for Toxics (T-BACT) and complies with all other applicable requirements, including definitions and public noticing, referenced in 40 CFR 63.40 through 63.44. The requirements of this paragraph shall not apply to:

- (A) any source that is subject to an existing National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to sections 112(d), 112(h), or 112(j) of the federal CAA;
- (B) any source that is exempted from regulations under a NESHAP issued pursuant to sections 112(d), 112(h), or 112(j) of the federal CAA;
- (C) any source that has received all necessary air quality permits for such construction or reconstruction before June 29, 1998;
- (D) electric utility steam generating units, unless and until such time as these units are added to the source category list pursuant to the requirements of section 112(c)(5) of the federal CAA;
- (E) any sources that are within a source category that has been deleted from the source category list pursuant to section 112(c)(9) of the federal CAA; or
- (F) research and development activities.

Compliance with this paragraph does not relieve any owner or operator of

a major stationary source from complying with all other applicable District rules and regulations, including this rule, any applicable state airborne toxic control measure, or other applicable state and federal laws. Exemptions under subdivision (g) of this rule do not apply to this paragraph. This paragraph shall take effect retroactively from June 29, 1998.

(e) Risk Assessment Procedures

- (1) The Executive Officer shall periodically publish procedures for determining health risks under this rule. To the extent possible, the procedures will be consistent with the policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA).
- (2) Within 150 days of risk values for compounds not in Table I being finalized by OEHHA, staff will bring proposed amendments to this rule to reflect changes to Table I.
- (3) Within 150 days of risk values for compounds in Table I being updated by OEHHA, staff will:
  - (A) publish a Notice of Intent to change risk values;
  - (B) perform an impact assessment, including socioeconomic effects; and
  - (C) submit a report to the District Governing Board with recommendations for changing the risk values in the procedures for determining risk assessment published pursuant to paragraph (e)(1).
- (4) To calculate the cumulative increase in MICR pursuant to paragraph (d)(1), the increase from each permit unit shall be based on the emissions of toxic air contaminants, the risk values, and risk assessment procedures applicable at the time when each complete application was deemed complete by the District.

(f) Emissions Calculations

- (1) For the purpose of determining MICR and cancer burden due to a new or relocated permit unit pursuant to this rule, the total Toxic Air Contaminant emissions from the new or relocated permit unit shall be calculated on an annual basis from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:
  - (A) the maximum rated capacity;

- (B) the maximum possible annual hours of operation;
  - (C) the maximum annual emissions; and
  - (D) the physical characteristics of the materials processed.
- (2) For the purpose of determining chronic HI due to a new or relocated permit unit pursuant to this rule, the total emissions from a permit unit shall be calculated on an annual average basis from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:
- (A) the maximum rated capacity;
  - (B) the annual average hours of operation;
  - (C) the annual average emissions; and
  - (D) the physical characteristics of the materials processed.
- (3) For the purpose of determining MICR, cancer burden and chronic HI due to a modified permit unit pursuant to this rule, the increase in emissions from the modified permit unit shall be calculated based on the difference between the total permitted emissions after the modification, calculated pursuant to the criteria established in subparagraphs (f)(1)(A), (B), (C), and (D), and:
- (A) the total permitted emissions prior to the modification as stated in the permit conditions; or
  - (B) if there are no existing permit conditions that limit emissions, the average annual emissions which have occurred during the two-year period immediately preceding the date of the complete permit application for modification or other appropriate period determined by the Executive Officer to be representative of a permit unit's operation; or
  - (C) for modification of any source installed prior to October 8, 1976, resulting from the addition of air pollution controls installed solely to reduce the issuance of air contaminants, emission shall be calculated from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:
    - (i) the maximum rated capacity; and
    - (ii) the maximum proposed daily hours of operation; and
    - (iii) the physical characteristics of the materials processed.
- (4) For the purpose of determining acute HI due to a new, relocated or modified permit unit pursuant to this rule, the total emissions from a



permit unit shall be calculated on a maximum hourly basis from permit conditions which directly limit the emissions or, when no such conditions exist, from:

- (A) the maximum rated capacity;
- (B) the maximum hourly emissions; and
- (C) the physical characteristics of the materials processed.

(5) De Minimus Values

Any permit unit with values at or below the screening levels as specified in the procedures for determining health risks under this rule, published pursuant to paragraph (e)(1), shall be deemed in compliance with the requirements of subdivision (d).

(g) Exemptions

(1) The requirements of subdivision (d) shall not apply to:

(A) Permit Renewal or Change of Ownership

Any permit unit which is in continuous operation, without modification or change in operating conditions, for which a new permit to operate is required solely because of permit renewal or change of ownership.

(B) Modification with No Increase in Risk

A modification of a permit unit that causes a reduction or no increase in the cancer burden, MICR or acute or chronic HI at any receptor location.

(C) Functionally Identical Replacement

A permit unit replacing a functionally identical permit unit, provided there is no increase in maximum rating or increase in emissions of any toxic air contaminants. For replacement of dry cleaning permit units only, provided there is no increase in any toxic air contaminants.

(D) Equipment Previously Exempt Under Rule 219

Equipment which previously did not require a written permit pursuant to Rule 219 that is no longer exempt, provided that the equipment was installed prior to the Rule 219 amendment eliminating the exemption and a complete application for the permit is received within one (1) year after the Rule 219 amendment removing the exemption.

- (E) **Modifications to Terminate Research Projects**

Modifications restoring the previous permit conditions of a permit unit, provided that: the applicant demonstrates that the previous permit conditions were modified solely for the purpose of installing innovative control equipment as part of a demonstration or investigation designed to advance the state of the art with regard to controlling emissions of toxic air contaminants; the emission reductions achieved by the demonstration project are not used for permitting any equipment with emission increases under the contemporaneous emission reduction exemption as specified in paragraph (g)(2); the demonstration project is completed within two (2) years; and a complete application is submitted no later than two (2) years after the date of issuance of the permit which modified the conditions of the previous permit for the purpose of the demonstration or investigation.
- (F) **Emergency Internal Combustion Engines**

Emergency internal combustion engines that are exempted under Rule 1304.
- (G) **Wood Product Stripping**

Wood product stripping permit units, provided that the risk increases due to emissions from the permit unit owned or operated by the applicant for which complete applications were submitted on or after July 10, 1998 will not exceed a MICR of 100 in one million ( $1.0 \times 10^{-4}$ ) or a total acute or chronic hazard index of five (5) at any receptor location. This exemption shall not apply to permit applications received after January 10, 2000, or sooner if the Executive Officer makes a determination that T-BACT is available to enable compliance with the requirements of paragraphs (d)(1), (d)(2) and (d)(3).
- (H) **Gasoline Transfer and Dispensing Facilities**

For gasoline transfer and dispensing facilities, as defined in Rule 461 – Gasoline Transfer and Dispensing, the Executive Officer shall not, for the purposes of paragraphs (d)(1) through (d)(5), consider the risk contribution of methyl tert-butyl ether for any gasoline transfer and dispensing permit applications deemed complete on or before December 31, 2003. If the state of

California extends the phase-out requirement for methyl tert-butyl ether as an oxygenate in gasoline, the limited time exemption shall be extended to that expiration date or December 31, 2004, whichever is sooner.

(2) Contemporaneous Risk Reduction

(A) The requirements of paragraphs (d)(1) and (d)(4) shall not apply if the applicant demonstrates that a contemporaneous risk reduction resulting in a decrease in emissions will occur such that both of the following conditions are met:

- (i) no receptor location will experience a total increase in MICR of greater than one in one million ( $1.0 \times 10^{-6}$ ) due to the cumulative impact of both the permit unit and the contemporaneous risk reduction; and
- (ii) the contemporaneous risk reduction occurs within 100 meters of the permit unit.

T-BACT shall be used on permit units exempted under this subparagraph if the MICR from the permit unit exceeds one in one million ( $1.0 \times 10^{-6}$ ).

(B) The requirements of paragraphs (d)(2) and (d)(3) shall not apply if the applicant substantiates to the satisfaction of the Executive Officer that a contemporaneous risk reduction will occur such that any increase in individual substance acute or chronic HI from the permit unit exceeding 1.0 is mitigated with an equal or greater decrease in the same individual substance acute or chronic HI, respectively, from the contemporaneous risk reduction such that both of the following conditions are met:

- (i) no receptor location will experience an increase in total acute or chronic HI of more than 1.0 due to the cumulative impact of both the permit unit and the contemporaneous risk reduction; and
- (ii) the contemporaneous risk reduction occurs within 100 meters of the permit unit.

(3) Alternate Hazard Index Levels

The requirements of paragraphs (d)(2) and (d)(3) shall not apply if the applicant substantiates to the satisfaction of the Executive Officer that at all receptor locations and for every target organ system, the total chronic

and acute HI level resulting from emissions from the new, modified or relocated permit unit owned or operated by the applicant for which applications were submitted on or after July 10, 1998 shall not exceed alternate HI levels which are determined by the Executive Officer in consultation with the Office of Environmental Health Hazard Assessment to be protective against adverse health effects. No alternate HI level shall exceed 10.

| <b>TABLE I</b>                |   |                                  |                                   |                                    |
|-------------------------------|---|----------------------------------|-----------------------------------|------------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |   |                                  |                                   |                                    |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>  | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b>    |
| 75-07-0                       | acetaldehyde  | December 7, 1990                 | September 8, 1998                 |                                    |
| 60-35-5                       | acetamide   | January 8, 1999                  |                                   |                                    |
| 107-02-8                      | acrolein  |                                  | June 15, 2001                     | August 13, 1999                    |
| 79-06-1                       | acrylamide (or propenamide)   | December 7, 1990                 | **                                |                                    |
| 79-10-7                       | acrylic acid  |                                  | *                                 | August 13, 1999                    |
| 107-13-1                      | acrylonitrile (or vinyl cyanide)  | December 7, 1990                 | May 3, 2002                       |                                    |
| 107-05-1                      | allyl chloride  | January 8, 1999                  |                                   |                                    |
| 117-79-3                      | aminoanthraquinone, 2-  | January 8, 1999                  |                                   |                                    |
| 7664-41-7                     | ammonia   |                                  | August 18, 2000                   | August 13, 1999                    |
| 62-53-3                       | aniline   | January 8, 1999                  |                                   |                                    |
| 7440-38-2                     | <b>arsenic and arsenic compounds (inorganic)</b><br>including, but not limited to:<br>arsenic compounds (inorganic)<br>arsine | December 7, 1990                 | June 15, 2001                     | August 13, 1999                    |
| 7784-42-1                     |   |                                  | *                                 | August 13, 1999<br>August 13, 1999 |
| 1332-21-4                     | asbestos  | June 1, 1990                     |                                   |                                    |
| 71-43-2                       | benzene (including benzene from gasoline)   | June 1, 1990                     | August 18, 2000                   | August 13, 1999                    |
| 92-87-5                       | benzidine (and its salts)   | December 7, 1990                 | **                                |                                    |
| 100-44-7                      | benzyl chloride   | September 8, 1998                | **                                | August 13, 1999                    |

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| <b>TOXIC AIR CONTAMINANTS</b> |  |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>                             | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 7440-41-7                     | beryllium and beryllium compounds            | December 7, 1990                 | May 3, 2002                       |                                 |
| 111-44-4                      | bis(2-chloroethyl)ether (DCEE)               | December 7, 1990                 |                                   |                                 |
| 117-81-7                      | bis(2-ethylhexyl)phthalate (DEHP)            | September 8, 1998                | **                                |                                 |
| 542-88-1                      | bis(chloromethyl)ether                       | December 7, 1990                 |                                   |                                 |
| 7789-30-2                     | bromine pentafluoride                        |                                  | *                                 |                                 |
| 106-99-0                      | butadiene, 1,3-                              | December 7, 1990                 | June 15, 2001                     |                                 |
| 7440-43-9                     | cadmium and cadmium compounds                | June 1, 1990                     | June 15, 2001                     |                                 |
| 75-15-0                       | carbon disulfide                             |                                  | May 3, 2002                       | August 13, 1999                 |
| 56-23-5                       | carbon tetrachloride (or tetrachloromethane) | June 1, 1990                     | June 15, 2001                     | August 13, 1999                 |
| 7782-50-5                     | chlorine                                     |                                  | August 18, 2000                   | August 13, 1999                 |
| 10049-04-4                    | chlorine dioxide                             |                                  | June 15, 2001                     |                                 |
| 95-83-0                       | chloro-o-phenylenediamine, 4-                | January 8, 1999                  |                                   |                                 |
| 95-69-2                       | chloro-o-toluidine, p-                       | January 8, 1999                  |                                   |                                 |
| 108-90-7                      | chlorobenzene                                |                                  | June 15, 2001                     |                                 |
|                               | <b>chlorofluorocarbons</b>                   |                                  |                                   |                                 |
| 75-43-4                       | dichlorodifluoromethane (CFC-12)             |                                  | *                                 |                                 |
| 75-69-4                       | trichlorofluoromethane (CFC-11)              |                                  | *                                 |                                 |
| 76-13-1                       | trichlorotrifluoroethane (CFC-113)           |                                  | *                                 |                                 |

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| <b>CAS #</b>                  | <b>SUBSTANCE</b>   | <b>EFFECTIVE DATE<br/>CANCER</b>          | <b>EFFECTIVE DATE<br/>CHRONIC</b>  | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 67-66-3                       | chloroform (trichloromethane)  | December 7, 1990                          | August 18, 2000                    | August 13, 1999                 |
| 95-57-8<br>88-06-2<br>87-86-5 | <b>Chlorophenols</b><br>chlorophenol, 2-<br>trichlorophenol, 2,4,6-<br>tetrachlorophenols (TECPH)<br>pentachlorophenol | December 7, 1990<br><br>September 8, 1998 | *<br><br>**                        |                                 |
| 76-06-2                       | chloropicrin   |   | May 3, 2002                        | August 13, 1999                 |
| 126-99-8                      | chloroprene  |   | **                                 |                                 |
| 18540-29-9<br>7758-97-6       | <b>chromium (hexavalent) and chromium compounds</b><br>including, but not limited to:<br>lead chromate                 | June 1, 1990<br><br>September 8, 1998     | June 15, 2001<br><br>**            |                                 |
| 1333-82-0                     | chromic trioxide   |   | June 15, 2001                      |                                 |
| 7440-50-8                     | copper and copper compounds  |   | *                                  | August 13, 1999                 |
| 120-71-8                      | residine, p-   | January 8, 1999                           |                                    |                                 |
| 1319-77-3<br>108-39-4         | <b>resols/resylic acid (all isomers and mixture)</b><br>resol, m-  |   | June 15, 2001<br><br>June 15, 2001 |                                 |





| <b>TABLE I</b>                |   |                       |                       |                       |
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| <b>TOXIC AIR CONTAMINANTS</b> |   |                       |                       |                       |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>                                      | <b>EFFECTIVE DATE</b> | <b>EFFECTIVE DATE</b> | <b>EFFECTIVE DATE</b> |
|                               |   | <b>CANCER</b>         | <b>CHRONIC</b>        | <b>ACUTE</b>          |
| 41903-57-5                    | octachlorodibenzo-p-dioxin,<br>1,2,3,4,5,6,7,8-       | June 1, 1990          | August 18, 2000       |                       |
| 36088-22-9                    | total tetrachlorodibenzo-p-dioxin                     | June 1, 1990          | August 18, 2000       |                       |
| 34465-46-8                    | total pentachlorodibenzo-p-dioxin                     | June 1, 1990          | August 18, 2000       |                       |
| 37871-00-4                    | total hexachlorodibenzo-p-dioxin                      | June 1, 1990          | August 18, 2000       |                       |
|                               | total heptachlorodibenzo-p-dioxin                     |                       |                       |                       |
|                               | total dioxins, with individual isomers<br>reported    | June 1, 1990          | August 18, 2000       |                       |
|                               | total dioxins, without individual isomers<br>reported | June 1, 1990          | August 18, 2000       |                       |
|                               | <b>dibenzofurans (chlorinated)</b>                    |                       |                       |                       |
| 51207-31-9                    | tetrachlorodibenzofuran, 2,3,7,8-                     | June 1, 1990          | August 18, 2000       |                       |
| 57117-41-6                    | pentachlorodibenzofuran, 1,2,3,7,8-                   | June 1, 1990          | August 18, 2000       |                       |
| 57117-31-4                    | pentachlorodibenzofuran, 2,3,4,7,8-                   | June 1, 1990          | August 18, 2000       |                       |
| 70648-26-9                    | hexachlorodibenzofuran, 1,2,3,4,7,8-                  | June 1, 1990          | August 18, 2000       |                       |
| 57117-44-9                    | hexachlorodibenzofuran, 1,2,3,6,7,8-                  | June 1, 1990          | August 18, 2000       |                       |
| 72918-21-9                    | hexachlorodibenzofuran, 1,2,3,7,8,9-                  | June 1, 1990          | August 18, 2000       |                       |
| 60851-34-5                    | hexachlorodibenzofuran, 2,3,4,6,7,8-                  | June 1, 1990          | August 18, 2000       |                       |
| 67562-39-4                    | heptachlorodibenzofuran, 1,2,3,4,6,7,8-               | June 1, 1990          | August 18, 2000       |                       |

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| <b>CAS #</b>                  | <b>SUBSTANCE</b>                               | <b>EFFECTIVE DATE</b> | <b>EFFECTIVE DATE</b> | <b>EFFECTIVE DATE</b> |
|                               |  | <b>CANCER</b>         | <b>CHRONIC</b>        | <b>ACUTE</b>          |
| 55673-89-7                    | heptachlorodibenzofuran, 1,2,3,4,7,8,9-        | June 1, 1990          | August 18, 2000       |                       |
| 39001-02-0                    | octachlorodibenzofuran, 1,2,3,4,5,6,7,8        | June 1, 1990          | August 18, 2000       |                       |
| 55722-27-5                    | total tetrachlorodibenzofuran                  | June 1, 1990          | August 18, 2000       |                       |
| 30402-15-4                    | total pentachlorodibenzofuran                  | June 1, 1990          | August 18, 2000       |                       |
| 55684-94-1                    | total hexachlorodibenzofuran                   | June 1, 1990          | August 18, 2000       |                       |
| 38998-75-3                    | total heptachlorodibenzofuran                  | June 1, 1990          | August 18, 2000       |                       |
| 96-12-8                       | dibromo-3-chloropropane, 1,2- (DBCP)           | September 8, 1998     | **                    |                       |
| 106-46-7                      | dichlorobenzene, 1,4- (or p-dichlorobenzene)   | September 8, 1998     | June 15, 2001         |                       |
| 91-94-1                       | dichlorobenzidine, 3,3                         | December 7, 1990      |                       |                       |
| 75-34-3                       | dichloroethane, 1,1-                           | January 8, 1999       |                       |                       |
| 75-35-4                       | dichloroethylene, 1,1-                         |                       | June 15, 2001         |                       |
| 111-42-2                      | diethanolamine                                 |                       | May 3, 2002           |                       |
| 60-11-7                       | dimethylaminoazobenzene, p-                    | January 8, 1999       |                       |                       |
| 68-12-2                       | dimethylformamide (N,N-)                       |                       | June 15, 2001         |                       |
| 121-14-2                      | dinitrotoluene, 2,4-                           | December 7, 1990      |                       |                       |
| 123-91-1                      | dioxane, 1,4- (or 1,4-diethylene dioxide)      | December 7, 1990      | August 18, 2000       | August 13, 1999       |
| 106-89-8                      | epichlorohydrin (or 1-chloro-2,3-epoxypropane) | December 7, 1990      | June 15, 2001         | August 13, 1999       |
| 106-88-7                      | epoxybutane, 1,2-                              |                       | June 15, 2001         |                       |

| <b>TABLE I</b>                |   |                                  |                                   |                                 |
|-------------------------------|---|----------------------------------|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |   |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>                            | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 140-88-5                      | ethyl acrylate                              |                                  | *                                 |                                 |
| 100-41-4                      | ethyl benzene                               |                                  | August 18, 2000                   |                                 |
| 75-00-3                       | ethyl chloride (or chloroethane)            |                                  | August 18, 2000                   |                                 |
| 106-93-4                      | ethylene dibromide (or 1,2-dibromoethane)   | June 1, 1990                     | May 3, 2002                       |                                 |
| 107-06-2                      | ethylene dichloride (or 1,2-dichloroethane) | June 1, 1990                     | June 15, 2001                     |                                 |
| 75-21-8                       | ethylene oxide (or 1,2-epoxyethane)         | June 1, 1990                     | June 15, 2001                     |                                 |
| 96-45-7                       | ethylene thiourea                           | January 8, 1999                  |                                   |                                 |
| 50-00-0                       | formaldehyde                                | December 7, 1990                 | August 18, 2000                   | August 13, 1999                 |
|                               | gasoline vapors                             |                                  | *                                 |                                 |
| 111-30-8                      | glutaraldehyde                              |                                  | June 15, 2001                     |                                 |
|                               | <b>glycol ethers (and their acetates)</b>   |                                  |                                   |                                 |
| 107-21-1                      | ethylene glycol                             |                                  | August 18, 2000                   |                                 |
| 111-76-2                      | ethylene glycol butyl ether                 |                                  | *                                 | August 13, 1999                 |
| 110-80-5                      | ethylene glycol ethyl ether                 |                                  | August 18, 2000                   | February 10, 1999               |
| 111-15-9                      | ethylene glycol ethyl ether acetate         |                                  | August 18, 2000                   | August 13, 1999                 |
| 109-86-4                      | ethylene glycol methyl ether                |                                  | August 18, 2000                   | August 13, 1999                 |
| 110-49-6                      | ethylene glycol methyl ether acetate        |                                  | August 18, 2000                   |                                 |
| 118-74-1                      | hexachlorobenzene                           | December 7, 1990                 | **                                |                                 |

| <b>TABLE I</b>                |  |                                  |                                   |                                 |
|-------------------------------|--|----------------------------------|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |  |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>   | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 608-73-1                      | <b>hexachlorocyclohexanes (mixed or technical grade)</b> | December 7, 1990                 | **                                |                                 |
| 58-89-9                       | hexachlorocyclohexane, gamma- (lindane)                  | September 8, 1998                | **                                |                                 |
| 77-47-4                       | hexachlorocyclopentadiene                                |                                  | *                                 |                                 |
| 110-54-3                      | hexane   |                                  | August 18, 2000                   |                                 |
| 302-01-2                      | hydrazine  | September 8, 1998                | June 15, 2001                     |                                 |
| 122-66-7                      | hydrazobenzene (or 1,2-diphenylhydrazine)                | December 7, 1990                 |                                   |                                 |
| 7647-01-0                     | hydrochloric acid (or hydrogen chloride)                 |                                  | August 18, 2000                   | August 13, 1999                 |
| 7664-39-3                     | hydrofluoric acid (or hydrogen fluoride)                 |                                  | *                                 | August 13, 1999                 |
| 10035-10-6                    | hydrogen bromide (HBR)                                   |                                  | *                                 |                                 |
| 74-90-8                       | hydrogen cyanide   |                                  | August 18, 2000                   | August 13, 1999                 |
| 7783-06-4                     | hydrogen sulfide   |                                  | August 18, 2000                   | February 10, 1999               |
| 7783-07-5                     | hydrogen selenide  |                                  |                                   | August 13, 1999                 |
| 624-83-9                      | <b>isocyanates</b><br>methyl isocyanate                  |                                  | May 3, 2002                       |                                 |
| 78-59-1                       | isophrone  |                                  | May 3, 2002                       |                                 |
| 67-63-0                       | isopropyl alcohol  |                                  | August 18, 2000                   | August 13, 1999                 |

| TABLE I                |   |                                       |                           |                         |
|------------------------|---|---------------------------------------|---------------------------|-------------------------|
| TOXIC AIR CONTAMINANTS |   |                                       |                           |                         |
| CAS #                  | SUBSTANCE   | EFFECTIVE DATE<br>CANCER              | EFFECTIVE DATE<br>CHRONIC | EFFECTIVE DATE<br>ACUTE |
| 7439-92-1              | <b>lead and lead compounds (inorganic, including elemental lead)</b> including, but not limited to:<br>lead compounds (inorganic)<br>lead acetate<br>lead chromate<br>lead phosphate<br>lead subacetate | September 8, 1998                     | **                        |                         |
| 301-04-2               |   | September 8, 1998                     | **                        |                         |
| 7758-97-6              |   | September 8, 1998                     | **                        |                         |
| 7446-27-7              |   | September 8, 1998                     | **                        |                         |
| 1335-32-6              |   | September 8, 1998                     | **                        |                         |
|                        |   | lead compounds (other than inorganic) | September 8, 1998         | **                      |
| 108-31-6               | maleic anhydride  |                                       | May 3, 2002               |                         |
| 7439-96-5              | manganese and manganese compounds   |                                       | August 18, 2000           |                         |
| 7439-97-6              | <b>mercury and mercury compounds (inorganic)</b><br>including, but not limited to:<br>mercuric chloride<br>methyl mercury   |                                       | August 18, 2000           | August 13, 1999         |
| 7487-94-7              |   |                                       | August 18, 2000           |                         |
| 593-74-8               |   |                                       | August 18, 2000           |                         |
| 67-56-1                | methanol (methyl alcohol)   |                                       | August 18, 2000           | August 13, 1999         |
| 74-83-9                | methyl bromide (or bromomethane)  |                                       | August 18, 2000           | August 13, 1999         |

| <b>TABLE I</b>                |   |                                  |                                   |                                 |
|-------------------------------|---|----------------------------------|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |   |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>  | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 71-55-6                       | methyl chloroform (or 1,1,1-trichloroethane)                          |                                  | August 18, 2000                   | August 13, 1999                 |
| 78-93-3                       | methyl ethyl ketone   |                                  | *                                 | August 13, 1999                 |
| 80-62-6                       | methyl methacrylate   |                                  | *                                 |                                 |
| 1634-04-4                     | methyl tert-butyl ether   | May 2, 2003                      | August 18, 2000                   |                                 |
| 101-14-4                      | methylene bis(2-chloroaniline), 4,4- (MOCA)                           | January 8, 1999                  |                                   |                                 |
| 75-09-2                       | methylene chloride (or dichloromethane)                               | June 1, 1990                     | August 18, 2000                   | August 13, 1999                 |
| 101-77-9                      | methylene dianiline, 4,4'- (and its dichloride)                       | September 8, 1998                | May 3, 2002                       |                                 |
| 101-68-8                      | methylene phenyl diisocyanate   |                                  | June 15, 2001                     |                                 |
| 1135                          | mineral fibers (other than man-made)                                  |                                  | *                                 |                                 |
| 90-94-8                       | michler's ketone  | January 8, 1999                  |                                   |                                 |
| 7440-02-0                     | <b>nickel and nickel compounds:</b><br>including, but not limited to: | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 373-02-4                      | nickel acetate  | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 3333-67-3                     | nickel carbonate  | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 13463-39-3                    | nickel carbonyl   | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 12054-48-7                    | nickel hydroxide  | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 1313-99-1                     | nickel oxide  | March 12, 1999                   | August 18, 2000                   | August 13, 1999                 |
| 12035-72-2                    | nickel subsulfide   | December 7, 1990                 | August 18, 2000                   | August 13, 1999                 |

| <b>TABLE I</b>                |   |                                    |                                    |                                    |
|-------------------------------|---|------------------------------------|------------------------------------|------------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |   |                                    |                                    |                                    |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>  | <b>EFFECTIVE DATE</b>              | <b>EFFECTIVE DATE</b>              | <b>EFFECTIVE DATE</b>              |
|                               |   | <b>CANCER</b>                      | <b>CHRONIC</b>                     | <b>ACUTE</b>                       |
| 1271-28-9                     | nickelocene<br>refinery dust from the pyrometallurgical<br>process              | March 12, 1999<br>December 7, 1990 | August 18, 2000<br>August 18, 2000 | August 13, 1999<br>August 13, 1999 |
| 7697-37-2                     | nitric acid   |                                    | *                                  | August 13, 1999                    |
| 98-95-3                       | nitrobenzene  |                                    | *                                  |                                    |
| 79-46-9                       | nitropropane, 2-  |                                    | *                                  |                                    |
| 759-73-9                      | nitroso-n-ethylurea, n-   | December 7, 1990                   |                                    |                                    |
| 684-93-5                      | nitroso-n-methylurea, n-  | December 7, 1990                   |                                    |                                    |
| 86-30-6                       | nitrosodiphenylamine, n-  | December 7, 1990                   |                                    |                                    |
| 156-10-5                      | nitrosodiphenylamine, p-  | September 8, 1998                  |                                    |                                    |
| 59-89-2                       | nitrosomorpholine, n-   | January 8, 1999                    |                                    |                                    |
| 100-75-4                      | nitrosopiperidine, n-   | January 8, 1999                    |                                    |                                    |
| 930-55-2                      | nitrosopyrrolidine, n-  | December 7, 1990                   |                                    |                                    |
| 108171-26-2                   | paraffins, chlorinated (average chain length,<br>c12; approx. 60% cl by weight) | January 8, 1999                    |                                    |                                    |
| 127-18-4                      | perchloroethylene (or tetrachloroethylene)                                      | September 8, 1998                  | September 8, 1998                  | August 13, 1999                    |
| 108-95-2                      | phenol  |                                    | August 18, 2000                    | August 13, 1999                    |
| 75-44-5                       | phosgene  |                                    | *                                  | August 13, 1999                    |
| 7723-14-0                     | <b>phosphorus and phosphorus compounds</b>                                      |                                    | *                                  |                                    |

| <b>TABLE I</b>                |   |  |  |                                 |
|-------------------------------|---|--|--|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |   |  |  |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>  | <b>EFFECTIVE DATE<br/>CANCER</b>   | <b>EFFECTIVE DATE<br/>CHRONIC</b>  | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 7803-51-2                     | phosphine   |  | February 7, 2003   |                                 |
| 7664-38-2                     | phosphoric acid   |  | August 18, 2000  |                                 |
| 85-44-9                       | phthalic anhydride  |  | June 15, 2001  |                                 |
| 1336-36-3                     | <b>polychlorinated biphenyls (PCBs)</b><br>3,3',4,4' Tetrachlorobiphenyl<br>3,4,4',5 Tetrachlorobiphenyl<br>2,3,3',4,4' Pentachlorobiphenyl<br>2,3,4,4',5 Pentachlorobiphenyl<br>2,3',4,4',5 Pentachlorobiphenyl<br>2',3,4,4',5 Pentachlorobiphenyl<br>3,3',4,4',5 Pentachlorobiphenyl<br>2,3,3',4,4',5 Hexachlorobiphenyl<br>2,3,3',4,4',5' Hexachlorobiphenyl<br>2,3',4,4',5,5' Hexachlorobiphenyl<br>3,3',4,4',5,5' Hexachlorobiphenyl<br>2,3,3',4,4',5,5' Heptachlorobiphenyl | December 7, 1990<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005*** | **<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005***<br>March 4, 2005*** |                                 |
|                               | <b>polycyclic aromatic hydrocarbons (PAHs)</b>  |  |  |                                 |



| <b>TABLE I</b>                |                                  |                                  |                                   |                                 |
|-------------------------------|----------------------------------|----------------------------------|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |                                  |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>                 | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 56-55-3                       | benz[a]anthracene                | December 7, 1990                 |                                   |                                 |
| 50-32-8                       | benzo[a]pyrene                   | December 7, 1990                 |                                   |                                 |
| 205-99-2                      | benzo[b]fluoranthene             | December 7, 1990                 |                                   |                                 |
| 205-82-3                      | benzo[j]fluoranthene             | January 8, 1999                  |                                   |                                 |
| 207-08-9                      | benzo[k]fluoranthene             | December 7, 1990                 |                                   |                                 |
| 218-01-9                      | chrysene                         | December 7, 1990                 |                                   |                                 |
| 226-36-8                      | dibenz[a,h]acridine              | January 8, 1999                  |                                   |                                 |
| 224-42-0                      | dibenz[a,j]acridine              | January 8, 1999                  |                                   |                                 |
| 53-70-3                       | dibenz[a,h]anthracene            | December 7, 1990                 |                                   |                                 |
| 192-65-4                      | dibenzo[a,e]pyrene               | January 8, 1999                  |                                   |                                 |
| 189-64-0                      | dibenzo[a,h]pyrene               | January 8, 1999                  |                                   |                                 |
| 189-55-9                      | dibenzo[a,i]pyrene               | January 8, 1999                  |                                   |                                 |
| 191-30-0                      | dibenzo[a,l]pyrene               | January 8, 1999                  |                                   |                                 |
| 194-59-2                      | dibenzo[c,g]carbazole, 7h-       | January 8, 1999                  |                                   |                                 |
| 57-97-6                       | dimethylbenz[a]anthracene, 7,12- | January 8, 1999                  |                                   |                                 |
| 42397-64-8                    | dinitropyrene, 1,6-              | January 8, 1999                  |                                   |                                 |
| 42397-65-9                    | dinitropyrene, 1,8-              | January 8, 1999                  |                                   |                                 |
| 193-39-5                      | indeno[1,2,3-cd]pyrene           | December 7, 1990                 |                                   |                                 |

| <b>TABLE I</b>  |   |  |                                   |                                 |
|---|---|--|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b>   |   |  |                                   |                                 |
| <b>CAS #</b>  | <b>SUBSTANCE</b>  | <b>EFFECTIVE DATE<br/>CANCER</b>   | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 56-49-5<br>3697-24-3<br>91-20-3<br>602-87-9<br>7496-02-8<br>607-57-8<br>5522-43-0<br>57835-92-4 | methylcholanthrene, 3-<br>methylchrysene, 5-<br>naphthalene<br>nitroacenaphthene, 5-<br>nitrochrysene, 6-<br>nitrofluorene, 2-<br>nitropyrene, 1-<br>nitropyrene, 4-<br>polycyclic aromatic hydrocarbons (PAHs),<br>total | January 8, 1999<br>January 8, 1999<br>March 4, 2005***<br>January 8, 1999<br>January 8, 1999<br>January 8, 1999<br>January 8, 1999<br>January 8, 1999<br>September 8, 1998 | August 18, 2000                   |                                 |
| 7758-01-2   | potassium bromate   | January 8, 1999  |                                   |                                 |
| 1120-71-4   | propane sultone, 1,3-   | January 8, 1999  |                                   |                                 |
| 115-07-1  | propylene   |  | August 18, 2000                   |                                 |
| 107-98-2  | propylene glycol methyl ether   |  | August 18, 2000                   |                                 |
| 75-56-9   | propylene oxide (or 1,2-epoxy propane)  | September 8, 1998  | February 23, 2000                 | August 13, 1999                 |
| 7782-49-2   | <b>selenium and selenium compounds</b><br>other than hydrogen selenide  |  | May 3, 2002                       |                                 |
| 1310-73-2   | sodium hydroxide  |  | *                                 | August 13, 1999                 |
| 100-42-5  | styrene (or vinyl benzene)  |  | August 18, 2000                   | August 13, 1999                 |

| <b>TABLE I</b>                |  |                                  |                                   |                                 |
|-------------------------------|--|----------------------------------|-----------------------------------|---------------------------------|
| <b>TOXIC AIR CONTAMINANTS</b> |  |                                  |                                   |                                 |
| <b>CAS #</b>                  | <b>SUBSTANCE</b>   | <b>EFFECTIVE DATE<br/>CANCER</b> | <b>EFFECTIVE DATE<br/>CHRONIC</b> | <b>EFFECTIVE DATE<br/>ACUTE</b> |
| 7664-93-9                     | sulfuric acid (and oleum)                                |                                  | May 3, 2002                       | August 13, 1999                 |
| 79-34-5                       | tetrachloroethane, 1,1,2,2-                              | January 8, 1999                  |                                   |                                 |
| 62-55-5                       | thioacetamide  | January 8, 1999                  |                                   |                                 |
| 108-88-3                      | toluene (or methyl benzene)                              |                                  | August 18, 2000                   | August 13, 1999                 |
| 584-84-9                      | <b>toluene diisocyanates</b><br>toluene-2,4-diisocyanate | September 8, 1998                | June 15, 2001                     |                                 |
| 91-08-7                       | toluene-2,6-diisocyanate                                 | September 8, 1998                | June 15, 2001                     |                                 |
| 79-00-5                       | trichloroethane, 1,1,2-                                  | January 8, 1999                  |                                   |                                 |
| 79-01-6                       | trichloroethylene  | December 7, 1990                 | August 18, 2000                   |                                 |
| 121-44-8                      | triethylamine  |                                  | February 7, 2003                  | August 13, 1999                 |
| 51-79-6                       | urethane (or ethyl carbamate)                            | September 8, 1998                |                                   |                                 |
| 1314-62-1                     | vanadium pentoxide                                       |                                  |                                   | August 13, 1999                 |
| 108-05-4                      | vinyl acetate  |                                  | May 3, 2002                       |                                 |
| 75-01-4                       | vinyl chloride (or chloroethylene)                       | December 7, 1990                 | **                                | August 13, 1999                 |
| 75-35-4                       | vinylidene chloride                                      |                                  | *                                 |                                 |
| 1330-20-7                     | <b>xylenes (isomers and mixture)</b>                     |                                  | August 18, 2000                   | August 13, 1999                 |
| 108-38-3                      | xylene, m-   |                                  | August 18, 2000                   | August 13, 1999                 |
| 95-47-6                       | xylene, o-   |                                  | August 18, 2000                   | August 13, 1999                 |

| TABLE I                |  |                          |                           |                         |
|------------------------|--|--------------------------|---------------------------|-------------------------|
| TOXIC AIR CONTAMINANTS |  |                          |                           |                         |
| CAS #                  | SUBSTANCE  | EFFECTIVE DATE<br>CANCER | EFFECTIVE DATE<br>CHRONIC | EFFECTIVE DATE<br>ACUTE |
| 106-42-3               | xylene, p-   |                          | August 18, 2000           | August 13, 1999         |
| 7440-66-6              | <b>zinc and zinc compounds</b><br>including, but not limited to: |                          | *                         |                         |
| 1314-13-2              | zinc oxide   |                          | *                         |                         |

\* Compounds not classified as carcinogenic, but have chronic risk values proposed by OEHHA that have not yet been finalized. The effective date is the date the Scientific Review Panel approves the chronic risk value, unless paragraph (e)(3) applies. Paragraph (e)(3) applies when the finalized chronic risk value differs from the value in the latest version of the Risk Assessment Procedures published pursuant to paragraph (e)(1).

\*\* Compounds are classified as carcinogenic, but have chronic risk values proposed by OEHHA that have not yet been finalized. The effective date for use of chronic risk values is the date the Scientific Review Panel approves the chronic risk value, unless paragraph (e)(3) applies.

\*\*\* Effective date for these risk values will be March 4, 2005 or date of implementation of the applicable Risk Assessment Procedures for Rules 1401 and 212 (Version 7.0), whichever is later.

| <b>TABLE II</b>   |  |
|---|--|
| <b>TOXIC AIR CONTAMINANTS WITH PROPOSED RISK VALUES</b> |  |
| <b>CAS #</b>  | <b>SUBSTANCE</b>                         |
| 79-10-7   | acrylic acid                             |
| 107-05-1  | allyl chloride                           |
| 7783-20-2   | ammonium sulfate                         |
| 62-53-3   | Aniline                                  |
| 1309-64-4   | antimony trioxide                        |
|   | arsenic compounds (other than inorganic) |
| 532-27-4  | chloroacetophenone, 2-                   |
| 75-45-6   | chlorodifluoromethane (HCFC-22)          |
| 7440-48-4   | cobalt and cobalt compounds              |
| 74-85-1   | Ethylene                                 |
| 96-45-7   | ethylene thiourea                        |
|   | fluorides and fluoride compounds         |
| 87-68-3   | hexachlorobutadiene                      |
| 67-72-1   | hexachloroethane                         |
| 822-06-0  | hexamethylene-1,6-diisocyanate           |
| 78-93-3   | methyl ethyl ketone (or 2-butanone)      |
| 7697-37-2   | nitric acid                              |
| 156-10-5  | nitrosodiphenylamine, p-                 |
| 7440-22-4   | silver and silver compounds              |
| 96-09-3   | styrene oxide                            |
| 79-00-5   | trichloroethane, 1,1,2-                  |
| 593-60-2  | vinyl bromide                            |