Chapter 173-460 WAC
CONTROLS FOR NEW SOURCES OF TOXIC AIR POLLUTANTS

WAC **Effective Date:** 8/21/98

WAC 173-460-010 Purpose. (1) Pursuant to chapter 70.94 RCW, Washington Clean Air Act, the purpose of this chapter is to establish the systematic control of new sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. Toxic air pollutants include carcinogens and noncarcinogens listed in WAC 173-460-150 and 173-460-160.

(2) This chapter establishes three major requirements:

(a) Best available control technology for toxics;

(b) Toxic air pollutant emission quantification;

(c) Human health and safety protection demonstration.

(3) Policy. It is the policy of ecology to reduce, avoid, or eliminate toxic air pollutants prior to their generation whenever economically and technically practicable.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-010, filed 6/18/91, effective 9/18/91.]

WAC 173-460-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. In the event of a conflict between the definitions provided in chapter 173-400 WAC and the definitions provided in this section, the definitions in this section shall govern. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter shall have the following meanings. Note: For copies of the above mentioned rule and any other rule cited in this chapter, contact the Department of Ecology, Records Section, P.O. Box 47600, Olympia, WA 98504-7600.

(1) "Acceptable source impact analysis" means a procedure for demonstrating compliance with WAC 173-460-070 and 173-460-080, that compares maximum incremental ambient air impacts with applicable acceptable source impact levels (ASIL).

(2) "Acceptable source impact level (ASIL)" means a concentration of a toxic air pollutant in the outdoor atmosphere in any area which does not have restricted or controlled public access that is used to evaluate the air quality impacts of a single source. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special. Concentrations for these three types of ASILs are determined as provided in WAC 173-460-110. ASILs are listed in WAC 173-460-150 and 173-460-160.

(3) "Authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source. Ecology is the authority if an air pollution control authority has not been activated or if ecology has jurisdiction over the source pursuant to RCW 70.94.395.

(4) "Best available control technology for toxics (T-BACT)" applies to each toxic air pollutant (TAP) discharged or mixture of TAPs, taking in account the potency quantity and toxicity of each toxic air pollutant or mixture of TAPs discharged in addition to the meaning given in WAC 173-400-030(10).

(5) "Carcinogenic potency factor" means the upper 95th percentile confidence limit of the slope of the dose-response curve and is expressed in units of (mg/kg-day)-1.

(6) "Class A toxic air pollutant (Class A TAP)" means a substance or group of substances listed in WAC 173-460-150.

(7) "Class B toxic air pollutant (Class B TAP)" means any substance that is not a simple asphyxiant or nuisance particulate and that is listed in WAC 173-460-160.

(8) "EPA's Dispersion Modeling Guidelines" means the United States Environmental Protection Agency Guideline on Air Quality Models, EPA (Revised) 40 CFR Part 51 Appendix W, and is hereby incorporated by reference.

(9) "EPA's Risk Assessment Guidelines" means the United States Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment, 51 FR 33992 (September 24, 1986) and is hereby incorporated by reference.

(10) "Increased cancer risk of one in one hundred thousand" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(11) "Increased cancer risk of one in one million" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one million individuals continually exposed to a Class A toxic air pollutant at a given average dose for a specified time.

(12) "Inhalation Reference Concentration (Inhalation RfC)" means a reference concentration published in the United States Environmental Protection Agency Integrated Risk Information System (IRIS).

(13) "Mixture" means a combination of two or more substances mixed in arbitrary proportions.

(14) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emission of any air contaminant not previously emitted. The term modification shall be construed consistent with the definition of modification in Section 7411, Title 42, United States Code, and with rules implementing that section. For purposes of this chapter, the term "air contaminant" shall mean "toxic air contaminant" or "toxic air pollutant" as defined in subsection (20) of this section.

(15) "New toxic air pollutant source" means:

(a) The construction or modification of a stationary source that increases the amount of any toxic air pollutant emitted by such source or that results in the emission of any toxic air pollutant not previously emitted; and

(b) Any other project that constitutes a new source under section 112 of the Federal Clean Air Act.

(16) "Second Tier Analysis" means an optional procedure used after T-BACT and acceptable source impact analysis for demonstrating compliance with WAC 173-460-070. The second tier analysis uses a health impact assessment as provided in WAC 173-460-090, instead of an acceptable source impact level.

(17) "Simple asphyxiant" means a physiologically inert gas or vapor that acts primarily by diluting atmospheric oxygen below the level required to maintain proper levels of oxygen in the blood. Examples of simple asphyxiants are given in Appendix X of the TLV Booklet referred to in subsection (19) of this section and incorporated by reference.

(18) "Threshold limit value-time weighted average (TLV-TWA)" means a concentration limit recommended by the American Conference of Governmental Industrial Hygienists (ACGIH) for a normal eight-hour workday and forty-hour workweek.

(19) "TLV Booklet" means "TLVs, Threshold Limit Values and Biological Exposure Indices for 1991-92," published by the American Conference of Governmental Industrial Hygienists and is hereby incorporated by reference.

(20) "Toxic air pollutant (TAP)" or "toxic air contaminant" means any Class A or Class B toxic air pollutant listed in WAC 173-460-150 and 173-460-160. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances within either of these classes is listed in WAC 173-460-150 and/or 173-460-160. The term toxic air pollutant does not include particulate matter and volatile organic compounds as generic classes of compounds.

(21) "Upper bound unit risk factor" means the 95 percent upper confidence limit of an estimate of the extra risk of cancer associated with a continuous 70 year exposure to 1 ug/m3 of a Class A toxic air pollutant.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-020, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-020, filed 6/18/91, effective 9/18/91.]

WAC 173-460-030 Requirements, applicability and exemptions. (1) Applicability.

(a) The provisions of this chapter shall apply state-wide. The authority shall enforce WAC 173-460-010, 173-460-020, 173-460-030, 173-460-040, 173-460-050, 173-460-060, 173-460-070, 173-460-080, 173-460-130, 173-460-140, 173-460-150, and 173-460-160.

(b) Except as provided in this chapter, any new toxic air pollutant source listed in (b)(i), (ii), or (iii) of this subsection that may emit a Class A or Class B TAP into the ambient air is subject to these regulations:

(i) Standard industrial classifications:

(A) Major group 10-Metal mining.

(B) Major group 12-Bituminous coal and lignite mining.

(C) Major group 13-Oil and gas extraction.

(D) Manufacturing industries major groups 20-39.

(E) Major group 49-Electric, gas, and sanitary services except 4971 irrigation systems.

(F) Dry cleaning plants, 7216.

(G) General medical surgical hospitals, 8062.

(H) Specialty hospitals, 8069.

(I) National security, 9711.

(ii) Any source or source category listed in WAC 173-400-100, 173-400-115(2), or 173-490-030(1) except WAC 173-490-030 (1)(e) gasoline dispensing facilities.

(iii) Any of the following sources:

(A) Landfills.

(B) Sites subject to chapter 173-340 WAC Model Toxics Control Act—Cleanup regulation.

(2) Exempt sources.

(a) Containers such as tanks, barrels, drums, cans, and buckets are exempt from the requirements of this chapter unless equipped with a vent other than those required solely as safety pressure release devices.

(b) Nonprocess fugitive emissions of toxic air pollutants from stationary sources, such as construction sites, unpaved roads, coal piles, waste piles, and fuel and ash handling operations are exempt from WAC 173-460-060.

(c) The following sources are generally exempt from the requirements of WAC 173-460-050, 173-460-070, 173-460-080, and 173-460-090. However, the authority may on a case-by-case basis, require compliance with these sections if the authority determines that the amount of emissions, nature of pollutant, or source location indicate that the ambient impact should be evaluated.

(i) Perchloroethylene dry cleaners

(ii) Petroleum solvent dry cleaning systems

(iii) Solvent metal cleaners

(iv) Chromic acid plating and anodizing

(v) Abrasive blasting

(d) Demolition and renovation projects involving asbestos removal and disposal are exempt from the requirements of this chapter.

(e) Process vents subject to 40 C.F.R. Parts 264 and 265, Subpart AA are exempt from the requirements of this chapter.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-030, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-030, filed 6/18/91, effective 9/18/91.]

WAC 173-460-040 New source review. (1) Applicability. This chapter supplements the new source review requirements of WAC 173-400-110 by adding additional new source review requirements for toxic air pollutant sources. If a notice of construction is required under both chapter 173-400 WAC and this chapter, the written applications shall be combined. A notice of construction is a written application to permit construction of a new source.

(a) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030(1) shall notify the authority prior to the construction, installation, or establishment of a new toxic air pollutant source and shall file a notice of construction application with the authority for the proposed emission unit(s). Notification and notice of construction are not required if the source is an exempt source listed in WAC 173-460-030(2) or subsection (2) of this section.

(b) The notice of construction and new source review applies only to the affected emission unit(s) and the contaminants emitted from the emission unit(s).

(c) New source review of a modification shall be limited to the emission unit or units proposed to be modified and the toxic air contaminants whose emissions would increase as a result of the modification.

(2) The owner or operator of a new toxic air pollutant source listed in WAC 173-460-030 (1) is not required to notify or file a notice of construction with the authority if any of the following conditions are met:

(a) Routine maintenance or repair requires equivalent replacement of air pollution control equipment; or

(b) The new source is a minor process change that does not increase capacity and total toxic air pollutant emissions do not exceed the emission rates specified in small quantity emission rate tables in WAC 173-460-080; or

(c) The new source is the result of minor changes in raw material composition and the total toxic air pollutant emissions do not exceed the emission rates specified in the small quantity emission rate tables in WAC 173-460-080.

(3) Additional information. Within thirty days of receipt of a notice of construction, the authority may require the submission of additional plans, specifications, and other information necessary for the review of the proposed new or modified source.

(4) Requirements for new toxic air pollutant sources. The authority shall review notice(s) of construction, plans, specifications, and other associated information to determine that:

(a) The source will be in accord with applicable federal, state, and authority air pollution control rules and regulations;

(b) The source will use T-BACT for emissions control for the toxic air pollutants which are likely to increase; and

(c) Sources required to use T-BACT for emission control demonstrate compliance with WAC 173-460-070 by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance, by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

(5) Preliminary determination. Within thirty days after receipt of all information required, the authority shall:

(a) Make preliminary determinations on the matters set forth in this section; and

(b) Initiate compliance with the provisions of WAC 173-400-171 relating to public notice and public comment, as applicable.

(6) Final determination. If, after review of all information received including public comment, the authority finds that all the conditions in this section are satisfied, the authority shall issue a regulatory order to approve the notice of construction for the proposed new source or modification. If the authority finds that the conditions in this section are not satisfied, the authority shall issue an order for the prevention of construction, installation, or establishment of the toxic air pollution source(s). Where ecology has jurisdiction, it will endeavor to make final determinations as promptly as possible.

(7) Appeal of decision. A final notice of construction decision may be appealed to the pollution control hearings board pursuant to chapter 43.21B RCW.

(8) Commencement of construction. The owner(s) or operator(s) of the new source shall not commence construction until the applicable notice of construction has been approved.

(9) Operation and maintenance plan. As a condition of notice of construction approval, prior to start up, the authority may require a plan for the operation and maintenance of all equipment and procedures to assure continuous compliance with this chapter.

(a) A copy of the plan shall be filed with the authority upon request.

(b) The plan shall reflect good industrial practice and may include operating parameters and maintenance procedures, and shall be updated to reflect any changes in good industrial practice.

(c) Submittal of all plans should coincide with the authorities reporting requirements where applicable.

(10) Jurisdiction. Emission of toxic air pollutants that exceed the acceptable source impact levels listed in WAC 173-460-150 and 173-460-160 requires ecology and, if applicable, authority approval as specified in WAC 173-460-090 and 173-460-100.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-040, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-040, filed 6/18/91, effective 9/18/91.]

WAC 173-460-050 Requirement to quantify emissions. (1) New sources.

(a) When applying for a notice of construction, an owner or operator of a new toxic air pollution source shall quantify those emissions of each TAP or combination of TAPs that:

(i) Will be used for the modeling procedures in WAC 173-460-080; and

(ii) That may be discharged after applying required control technology. The information shall be submitted to the authority.

(b) Emissions shall be quantified in sufficient detail to determine whether the source complies with the requirements of this chapter.

(2) Small quantity sources.

Sources that choose to use small quantity emission rate tables instead of using dispersion modeling shall quantify emissions as required under WAC 173-460-080, in sufficient detail to demonstrate to the satisfaction of the authority that the emissions are less than the applicable emission rates listed in WAC 173-460-080.

(3) Level of detail.

An acceptable source impact level analysis under WAC 173-460-080, may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-460-070 and 173-460-080 cannot be demonstrated, more precise emission estimates shall be used to demonstrate compliance with WAC 173-460-090.

(4) Mixtures of toxic air pollutants.

(a) An owner or operator of a source that may discharge more than one toxic air pollutant may demonstrate compliance with WAC 173-460-070 and 173-460-080 by:

(i) Quantifying emissions and performing modeling for each TAP individually; or

(ii) Calculating the sum of all TAP emissions and performing modeling for the total TAP emissions and comparing maximum ambient levels to the smallest ASIL; or

(iii) Equivalent procedures may be used if approved by ecology.

(b) Dioxin and furan emissions shall be considered together as one TAP and expressed as an equivalent emission of 2,3,7,8 TCDD based on the relative potency of the isomers in accordance with United States Environmental Protection Agency (EPA) guidelines.

Note: Copies of EPA *"Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs). 1989 Update"* are available by requesting EPA /625/3-89/016, March 1989 from ORD Publications (513) 684-7562.

(c) Polyaromatic hydrocarbon (PAH) emissions. The owner or operator of a source that may emit a mixture of polyaromatic hydrocarbon emissions shall quantify the following PAHs and shall consider them together as one TAP equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indenol(1,2,3-cd)pyrene, benzo(a)pyrene. The acceptable source impact analysis shall be conducted using the polyaromatic hydrocarbon emission ASIL contained in WAC 173-460-150(3).

(d) Uncontrolled roof vent emissions from primary aluminum smelters. The owner or operator of a primary aluminum smelter that may emit a mixture of polyaromatic hydrocarbons from uncontrolled roof vents shall quantify PAH emissions using either of the following methods:

(i) Quantify PAH emissions using the procedures in (c) of this subsection; or

(ii) Multiply the total particulate emission mass from the uncontrolled roof vents by the percent of the particulate that is extractable organic matter. The percent extractable organic matter shall be considered one percent of total particulate matter unless ecology determines that there is compelling scientific data which demonstrates that the use of this value is inappropriate. The acceptable source impact analysis shall be conducted using the primary aluminum smelter uncontrolled roof vent PAH emission ASIL contained in WAC 173-460-150(3). Note: For example, 100 grams of particulate air emission mass times one percent yields one gram of PAH emissions.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-050, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-050, filed 6/18/91, effective 9/18/91.]

WAC 173-460-060 Control technology requirements. Except as provided for in WAC 173-460-040, a person shall not establish, operate, or cause to be established or operated any new toxic air pollutant source which is likely to increase TAP emissions without installing and operating T-BACT. Satisfaction of the performance requirements listed below fulfill the T-BACT requirement for those particular sources. Local air pollution authorities may develop and require performance requirements in lieu of T-BACT provided that ecology approves the performance requirements as equivalent to T-BACT.

(1) Perchloroethylene dry cleaners. The requirements for perchloroethylene dry cleaners found in WAC 173-400-075 are considered T-BACT.

(2) Petroleum solvent dry cleaning systems. A petroleum solvent dry cleaning system shall include the following:

(a) All cleaned articles are dried in a solvent recovery dryer or the entire dryer exhaust is vented through a properly functioning control device which will reduce emissions to no more than 3.5 kg of VOC per 100 kg dry weight of cleaned articles; and

(b) All cartridge filtration systems are drained in their sealed housing or other enclosed container before discarding the cartridges; and

(c) All leaking components shall be repaired immediately.

(3) Chromic acid plating and anodizing. The facility-wide uncontrolled hexavalent chromium emissions from plating or anodizing tanks shall be reduced by at least ninety-five percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emission control system which limits hexavalent chromium emissions to no more than 0.15 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-five percent.

(4) Chromic acid plating and anodizing (greater than 1 kilogram). If the facility-wide hexavalent chromium emissions from chromic acid plating and anodizing are greater than 1 kilogram per year after the application of control techniques required by subsection (3) of this section, the facility-wide hexavalent chromium emissions shall be reduced by at least ninety-nine percent using either of the following control techniques:

(a) An antimist additive or other equally effective control method approved by ecology or authority; or

(b) The tank is equipped with:

(i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and

(ii) An emissions control system which limits hexavalent chromium emissions to no more than 0.03 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-nine percent.

(5) Solvent metal cleaners.

(a) Any solvent metal cleaner shall include all of the following equipment:

(i) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased;

(ii) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank;

(iii) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75;

(iv) Vapor degreasers shall have:

(A) A high vapor cutoff thermostat with manual reset; and

(B) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level; and

(C) Either a freeboard ratio greater than or equal to 1.00 or a refrigerated freeboard chiller; and

(v) Conveyorized vapor degreasers shall have:

(A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser; and

(B) A high vapor cutoff thermostat with manual reset; and

(C) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.

(b) The operation of any solvent metal cleaner shall meet the following requirements:

(i) Solvent shall not leak from any portion of the degreasing equipment;

(ii) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere;

(iii) For cold cleaners, cleaned parts shall be drained until dripping ceases; and

(iv) Degreasers shall be constructed to allow liquid solvent from cleaned parts to drain into a trough or equivalent device and return to the solvent tank.

(c) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully;

(ii) The work load shall be degreased in the vapor zone until condensation ceases;

(iii) Spraying operations shall be done within the vapor layer;

(iv) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than three meters per minute (ten feet per minute);

(v) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (fifty feet per minute); and

(vi) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.

(d) For conveyorized vapor degreasers, solvent drag-out shall be minimized by the following measures:

(i) Racked parts shall be allowed to drain fully; and

(ii) Vertical conveyor speed shall be maintained at less than three meters per minute (ten feet per minute).

(6) Abrasive blasting.

(a) Abrasive blasting shall be performed inside a booth or hangar designed to capture the blast grit or overspray.

(b) Outdoor blasting of structures or items too large to be reasonably handled indoors shall employ control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps.

(c) Outdoor blasting shall be performed with either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.

(d) All abrasive blasting with sand shall be performed inside a blasting booth or cabinet.

[Statutory Authority: RCW 70.94.860, 70.94.510 and 70.94.331. 98-15-129 (Order 98-04), § 173-460-060, filed 7/21/98, effective 8/21/98. Statutory Authority: Chapter 70.98 RCW. 98-04-062 (Order 97-38), § 173-460-060, filed 2/2/98, effective 3/5/98. Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-060, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-060, filed 6/18/91, effective 9/18/91.]

WAC 173-460-070 Ambient impact requirement. When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall demonstrate that emissions from the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance shall be demonstrated in any area which does not have restricted or controlled public access. The source shall demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-070, filed 6/18/91, effective 9/18/91.]

WAC 173-460-080 Demonstrating ambient impact compliance. (1) When applying for a notice of construction under WAC 173-460-040, the owner or operator of a new toxic air pollutant source which is likely to increase TAP emissions shall complete an acceptable source impact level analysis for Class A and Class B TAPs. The authority may complete this analysis.

(2) Acceptable source impact analysis.

(a) Carcinogenic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class A TAP from the source and compare the estimated incremental ambient values to the Class A acceptable source impact levels in WAC 173-460-150. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(b) Other toxic effects. The owner or operator shall use dispersion modeling to estimate the maximum incremental ambient impact of each Class B TAP from the source and compare the estimated ambient values to the Class B acceptable source impact levels in WAC 173-460-160. If applicable, the source may use the small quantity emission rate tables in (e) of this subsection.

(c) Dispersion modeling. The owner or operator shall use dispersion modeling techniques in accordance with EPA guidelines. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission estimation techniques shall be used. Refined modeling techniques shall be approved by ecology and the authority. (Note: EPA's Guideline on Air Quality Models, EPA 450/2-78-027R, can be obtained through NTIS (703) 487-4650 or can be downloaded from the OAQPS Technology Transfer Network electronic bulletin board system).

(d) Averaging times. The owner or operator shall use the averaging times in (d)(i), (ii), (iii) of this subsection unless alternate averaging times are approved by ecology. Ecology may allow the use of an alternate averaging time if it determines that the operating procedures of the source may cause a high concentration of a TAP for a short period and that consideration of potential health effects due to peak exposures may be warranted for the TAP.

(i) An annual average shall be used for Class A TAPs listed in WAC 173-460-150(2).

(ii) The averaging times specified in WAC 173-460-150(3) shall be used for Class A TAPs listed in WAC 173-460-150(3).

(iii) A twenty-four-hour averaging time shall be used for Class B TAPs listed in WAC 173-460-160.

(e) Small quantity emission rates. Instead of using dispersion modeling to show compliance with ambient impact demonstration requirements in WAC 173-460-080 and 173-460-090, a source may use the small quantity emission rate tables for all toxic air pollutants with acceptable source impact levels equal to or greater than 0.001 ug/m3. A source must first meet control technology and emission quantification requirements of WAC 173-460-050 and 173-460-060, then demonstrate that the source emission rate does not exceed the rates specified in the appropriate table below.

SMALL QUANTITY EMISSION RATES
CLASS A TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (Annual ug/m3)	TAP Emissions Pounds per Year (10 meter stack and downwash)
0.001 to 0.0099	0.5
0.01 to 0.06	10
0.07 to 0.12	20
0.13 to 0.99	50
1.0 to 10	500

SMALL QUANTITY EMISSION RATES
CLASS B TOXIC AIR POLLUTANTS

Acceptable Source Impact Level (24 hour ug/m3)	TAP Emissions	
	Pounds per Year	Pounds per Hour
Less than 1	175	0.02
1 to 9.9	175	0.02
10 to 29.9	1,750	0.20
30 to 59.9	5,250	0.60
60 to 99.9	10,500	1.20
100 to 129.9	17,500	2.0
130 to 250	22,750	2.6
Greater than 250	43,748	5.0

(3) Criteria for compliance. Compliance with WAC 173-460-070 is demonstrated if the authority determines that, on the basis of the acceptable source impact analysis, the source's maximum incremental ambient air impact levels do not exceed the Class A or Class B acceptable source impact levels in WAC 173-460-150 and 173-460-160; or, if applicable, the source TAP emission rates do not exceed the rates specified in subsection (2)(e) of this section.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-080, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-080, filed 6/18/91, effective 9/18/91.]

WAC 173-460-090 Second tier analysis. (1) Applicability.

(a) The owner or operator who cannot demonstrate class A or class B TAP source compliance with WAC 173-460-070 and 173-460-080 using an acceptable source impact level analysis as provided in WAC 173-460-080(2), may submit a petition requesting ecology perform a second tier analysis evaluation to determine a means of compliance with WAC 173-460-070 and 173-460-080 by establishing allowable emissions for the source. Petitions for second tier analysis evaluation shall be submitted to the local authority or ecology if ecology has jurisdiction over the source. Petitions received by local authorities shall be submitted to ecology within ten days of receipt. A second tier analysis evaluation may be requested when a source wishes to more accurately characterize risks, to justify risks greater than acceptable source impact levels, or to otherwise modify assumptions to more accurately represent risks. Risks may be more accurately characterized by utilizing updated EPA unit risk factors, inhalation reference concentrations, or other

EPA recognized or approved methods. Ecology shall specify the maximum allowable emissions of any class A or class B TAP source based on ecology's second tier analysis evaluation.

(b) Ecology shall evaluate a source's second tier analysis only if:

(i) The authority has advised ecology that other conditions for processing the notice of construction have been met; and

(ii) Emission controls contained in the conditional notice of construction represent at least T-BACT; and

(iii) Ambient concentrations exceed acceptable source impact levels after using more refined emission quantification and air dispersion modeling techniques.

(c) Ecology shall determine whether the conditions in (b)(i), (ii), and (iii) of this subsection for a second tier analysis have been satisfied within ten working days of receipt of all information needed to make the determination. The matter shall be returned to the authority if ecology finds the conditions for a second tier analysis evaluation have not been met.

(2) Jurisdiction.

(a) Any second tier analysis application submitted by a source wishing to emit toxic air pollutants at levels greater than the acceptable source impact level contained in WAC 173-460-150 or 173-460-160 shall be approved or rejected by ecology.

(b) Any new emission limits approved by ecology as a result of the second tier analysis evaluation shall be enforced by the authority provided the authority approves the new emission limits.

(3) Approval criteria.

(a) Based on the second tier analysis, ecology may approve the emissions of TAPs from a source where ambient concentrations exceed acceptable source impact levels only if it determines that emission controls represent at least T-BACT and the source demonstrates that emissions of Class A TAPs are not likely to result in an increased cancer risk of more than one in one hundred thousand. The emission of Class A TAPs at levels likely to result in an increased cancer risk of more than one in one hundred thousand requires the approval of the director after complying with WAC 173-460-100.

(b) Ecology shall consider the second tier analysis and other information submitted by the applicant as well as department of health comments.

(i) Comments from other agencies and universities with appropriate expertise may also be considered in the decision to approve emissions that exceed acceptable source impact levels.

(ii) Public comments shall be considered if the source applies for a risk management decision under WAC 173-460-100.

(4) Contents of the second tier analysis.

(a) The second tier analysis consists of a health impact assessment. The applicant shall complete and submit a health impact assessment to ecology which includes the following information. Ecology may approve the submittal of less information if it determines that such information is sufficient to perform the second tier analysis evaluation. The health impact assessment shall be prepared in accordance with EPA's risk assessment guidelines as defined in WAC 173-460-020(9).

(i) Demographics such as population size, growth, and sensitive subgroups;

(ii) Toxicological profiles of all toxic air pollutants that exceed the ASIL;

(iii) Characterization of existing pathways and total daily intake for toxic air pollutants that exceed the ASIL;

(iv) Contribution of the proposed source toward total daily intake for toxic air pollutants that exceed the ASIL;

(v) Using existing data, characterization of risk from current exposure to the toxic air pollutants that exceed the ASIL. This includes existing TAP sources in the area, and anticipated risk from the new source;

(vi) Additive cancer risk for all Class A toxic air pollutants which may be emitted by the source;

(vii) Other information requested by ecology and pertinent to ecology's decision to approve the second tier application;

(viii) Uncertainty in the data; and

(ix) Length of exposure and persistence in the environment.

(b) The health assessment shall utilize current scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used to justify modifications of upper bound unit risk factors used to calculate ASILs in WAC 173-460-150 and/or absorption rates of individual toxic air pollutants if ecology determines there is compelling scientific data which demonstrates that the use of EPA recognized or approved methods are inappropriate.

(5) Additional information.

(a) If approved by ecology, newly discovered scientific information which was unavailable at the time of the original submission of the health assessment may be used to justify modifications of the original health assessment. Ecology may approve the additional information if the source exercised due diligence at the time of original submission.

(b) Within thirty days after receipt of the second tier analysis and all supporting data and documentation, ecology may require the submission of additional information needed to evaluate the second tier analysis.

(6) Determination.

(a) If the second tier analysis is approved by ecology, ecology will return the petition to the authority and the authority may approve the notice of construction.

(b) The authority shall specify allowable emissions consistent with ecology's second tier analysis evaluation determination expressed in weight of pollutant per unit time for each emissions unit involved in the application. The notice of construction shall also include all requirements necessary to assure that conditions of this chapter and chapter 173-400 WAC are satisfied.

(7) Public notification requirements.

Ecology decisions regarding second tier analysis or decisions under WAC 173-460-100 shall comply with public notification requirements contained in WAC 173-400-171.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-090, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-090, filed 6/18/91, effective 9/18/91.]

WAC 173-460-100 Request for risk management decision. (1) Applicability. The owner or operator of a source that emits Class A TAPs that are likely to result in an increased cancer risk of more than one in one hundred thousand may request that ecology establish allowable emissions for the source.

(2) Contents of the application.

The applicant shall meet the submittal requirements of WAC 173-460-090(1) and submit all materials required under WAC 173-460-090 (4) and (5). The applicant may submit the request for a risk management decision concurrently with the second tier analysis application. Prior denial of the second tier analysis application under WAC 173-460-090(6) is not required.

(3) Criteria for approval. Ecology may approve the emissions of TAPs from a source where ambient concentrations are likely to result in an increased cancer risk of more than one in one hundred thousand only if the source first demonstrates the following:

(a) Proposed emission controls represent all known available and reasonable technology; and

(b) Application of all known available toxic air pollution prevention methods to reduce, avoid, or eliminate toxic air pollutants prior to their generation including recycling, chemical substitution, and efforts to redesign processes; and

(c) The proposed changes will result in a greater benefit to the environment as a whole.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the owner or operator may propose and ecology may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that such measures are not already required.

(5) Public involvement. Ecology will initiate public notice and comment within thirty days of receipt of a completed risk management decision application. In addition to the public notice and comment requirements of WAC 173-400-171, the owner or operator shall hold a public hearing to:

(a) Present the results of the second tier analysis, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and

(b) Participate in discussions and answer questions.

(6) Time limitation. The owner or operator shall commence construction within eighteen months of the director's approval.

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-100, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-100, filed 6/18/91, effective 9/18/91.]

WAC 173-460-110 Acceptable source impact levels. There are three types of acceptable source impact levels: Risk-based, threshold-based, and special acceptable source impact levels. They are computed as follows:

(1) Risk-based acceptable source impact levels for Class A TAPs. Risk-based acceptable source impact levels means the annual average concentration, in micrograms per cubic meter, that may cause an increased cancer risk of one in one million. Ecology shall calculate the risk-based acceptable source impact levels for Class A TAPs in WAC 173-460-150(2) using the following equation:

$$\text{Risk based ASIL (ug/m3)} = \frac{\text{RISK}}{\text{URF}}$$

*Where:
RISK= Cancer risk level (1 in 1,000,000)
URF = Upper bound unit risk factor as published in IRIS data base or other appropriate sources (ug/m3)-1.

(2) Threshold-based acceptable source impact levels for Class B TAPs. Thre shold-based acceptable source impact levels in WAC 173-460-160 shall be determined as follows:

(a) If a Class B TAP has an Environmental Protection Agency Inhalation Reference Concentration, the inhalation reference concentration and specified averaging time shall be used.

(b) Other Class B TAP acceptable source impact levels shall be determined by dividing the TLV-TWA by three hundred to calculate a twenty-four hour TWA acceptable source impact level.

(3) Special acceptable source impact levels.

(a) Ecology may establish special acceptable source impact levels for TAPs for which upper bound risk factors or TLVs have not been established, or for mixtures of compounds if it deter mines that the a bove acceptable source impact level methods are not appropriate, do not adequately protect human health or are overly stringent.

(b) The averaging times for special ASILs are listed in WAC 173-460-150(3).

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-110, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-110, filed 6/18/91, effective 9/18/91.]

WAC 173-460-120 Scientific review and amendment of acceptable source impact levels and lists. (1) Ongoing scientific review.

(a) To use the best available scientific information, ecology shall conduct an ongoing review of information concerning whether to add or delete toxic air pollutants to WAC 173-460-150 or 173-460-160, what acceptable source impact levels should be used to review emissions of TAPs, source applicability and exemptions.

(b) A complete review shall be made at least once every three years at which time ecology shall consider scientific information developed by the E.P.A., Washington department of health, other states or other scientific organizations, scientific information provided by any person, and results of second tier analyses evaluations.

(2) Criteria for listing as Class A or Class B TAP.

(a) Ecology shall list a substance or group of substances as Class A or Class B TAPs if the department has reason to believe that the compound or group of compounds are likely to be emitted to the air from an air pollution source and the air emission of such compound or compounds could impact public health. The compounds shall be removed from the list if ecology determines that these conditions no longer exist.

(b) Ecology may list mixtures of compounds as Class A and/or Class B TAPs if ecology determines that the health impact of the emission mixture is likely to be different from the known individual chemical impacts.

(3) Acceptable source impact level (ASIL).

Ecology may adopt an ASIL only if ecology determines that concentrations at that level will not unreasonably endanger human health.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-120, filed 6/18/91, effective 9/18/91.]

WAC 173-460-130 Fees. (1) Pursuant to RCW 70.94.152, ecology or the authority may charge a fee for the review of notices of construction.

(2) The fee imposed under this section may not exceed the cost of reviewing plans, specifications, and other information and administering such notice.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-130, filed 6/18/91, effective 9/18/91.]

WAC 173-460-140 Remedies. Violations of this chapter are subject to the penalty provisions and/or other remedies provided in chapter 70.94 RCW.

[Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-140, filed 6/18/91, effective 9/18/91.]

WAC 173-460-150 Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.

(1) TABLE I
CLASS A TOXIC AIR POLLUTANTS
Known and Probable Carcinogens

CAS #	SUBSTANCE
75-07-0	Acetaldehyde
53-96-3	2-Acetylaminofluorene
79-06-1	Acrylamide
107-13-1	Acrylonitrile
309-00-2	Aldrin
—	Aluminum smelter polyaromatic hydrocarbon emissions
117-79-3	2-Aminoanthraquinone
97-56-3	o-Aminoazotoluene
92-67-1	4-Aminobiphenyl
61-82-5	Amitrole
62-53-3	Aniline
90-04-0	o-Anisidine
C7440-38-2	Arsenic and inorganic arsenic compounds
1332-21-4	Asbestos
2465-27-2	Auramine (technical grade)
71-43-2	Benzene
92-87-5	Benzidine and its salts
56-55-3	Benzo(a)anthracene
50-32-8	Benzo(a)pyrene
205-99-2	Benzo(b)fluoranthene
205-82-3	Benzo(j)fluoranthene
207-08-9	Benzo(k)fluoranthene
1694-09-3	Benzyl violet 4b
7440-41-7	Beryllium and compounds
111-44-4	Bis(2-chloroethyl)ether
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis(chloromethyl)ether
75-25-2	Bromoform
106-99-0	1,3-Butadiene
3068-88-0	B-Butyrolactone
7440-43-9	Cadmium and compounds
56-23-5	Carbon tetrachloride
57-74-9	Chlordane
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether (technical-grade)
108-43-0	Chlorophenols
126-99-8	Chloroprene
C7440-47-3	Chromium, hexavalent metal and compounds
—	Coke oven emissions
8001-58-9	Creosote
135-20-6	Cupferron
94-75-7	2,4-D and esters
3547-04-4	DDE (p,p'-Dichlorodiphenyldichloroethylene)
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis(p-chlorophenyl)-ethane)
613-35-4	N,N-Diacetylbenzidine
101-80-4	4,4'-Diaminodiphenyl ether
226-36-8	Dibenz(a,h)acridine
53-70-3	Dibenz(a,h)anthracene
224-42-0	Dibenz(a,j)acridine
132-64-9	Dibenzofurans
189-64-0	Dibenzo(a,h)pyrene
191-30-0	Dibenzo(a,l)pyrene
189-55-9	1,2,7,8-Dibenzopyrene (dibenzo(a,i)pyrene)
192-65-4	Dibenzo(a,e)pyrene
764-41-0	1,4-Dichloro-2-butene
28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
107-06-2	1,2-Dichloroethane (ethylene chloride)
75-09-2	Dichloromethane (methylene chloride)
696-28-6	Dichlorophenylarsine (arsenic group)

CAS #	SUBSTANCE
78-87-5	1,2-Dichloropropane
60-57-1	Dieldrin
1615-80-1	1,2-Diethylhydrazine
101-90-6	Diglycidyl resorcinol ether
119-90-4	3,3'-Dimethoxybenzidine (ortol-dianisidine)
119-93-7	3,3-Dimethyl benzidine
77-78-1	Dimethyl sulfate
540-73-8	1,2-Dimethylhydrazine
123-91-1	1,4-Dioxane
——	Dioxins and furans
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin
106-93-4	Ethylene dibromide (dibromethane)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
50-00-0	Formaldehyde
67-45-8	Furazolidone
	Furium (nitrofuran group)
765-34-4	Glyciadaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
319-84-6	Hexachlorocyclohexane (Lindane) Alpha BHC
319-85-7	Hexachlorocyclohexane (Lindane) Beta BHC
58-89-9	Hexachlorocyclohexane (Lindane) Gamma BHC
680-31-9	Hexamethylphosphoramide
302-01-2	Hydrazine
193-39-5	Indeno(1,2,3-cd)pyrene
——	Isopropyl oils
——	Lead compounds
301-04-2	Lead acetate
7446-27-7	Lead phosphate
129-15-7	2-Methyl-1-nitroanthraquinone
592-62-1	Methyl azoxymethyl acetate
3697-24-3	5-Methylchrysene
101-14-4	4,4'-Methylenebis(2-chloroaniline) (MBOCA)
838-88-0	4,4'-Methylenebis(2-methylaniline)
101-77-9	4,4-Methylene dianiline
13552-44-8	4,4-Methylenedianiline dihydrochloride
64091-91-4	4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone
2385-85-5	Mirex
139-91-3	5-(Morpholinomethyl)-3-amino)- 2-oxazolidinone (furaltudone)
134-32-7	1-Napthylamine
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)
531-82-8	N-(4-(5-Nitro-2-furyl)-2-thiazolyl)acetamide
602-87-9	5-Nitroacenaphthene
1836-75-5	Nitrofen
	Nitrofurans
59-87-0	Nitrofurazone
555-84-9	1-(5-Nitrofurfurylidene)amino)-2-imidazolidinone
126-85-2	Nitrogen mustard N-oxide
302-70-5	Nitrogen mustard N-oxide hydrochloride
79-46-9	2-Nitropropane
924-16-3	N-Nitrosodi-n-butylamine
759-73-9	N-Nitroso-N-ethylurea (NEU)
615-53-2	N-Nitroso-N-methylurethane
621-64-1	N-Nitrosodi-n-propylamine
10595-95-6	N-Nitrosomethylethylamine
59-89-2	N-Nitrosomorpholine
86-30-6	N-Nitrosodiphenylamine
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)
62-75-9	N-Nitrosodimethylamine
2646-17-5	Oil orange SS
794-93-4	Panfuran S (dihydroxymethylfuratrizine)
87-86-5	Pentachlorophenol
127-18-4	Perchloroethylene (tetrachloroethylene)
63-92-3	Phenoxybenzamine hydrochloride
	N-Phenyl-2-napthylamine
——	Polyaromatic hydrocarbons (PAH)
1336-36-3	Polychlorinated biphenyls (PCBs)
3761-53-3	Ponceau MX
	P(p)(alpha, alpha, alpha)-Tetra-chlorotoluene
1120-71-4	1,3-Propane sultone

CAS #	SUBSTANCE
75-56-9	Propylene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)
139-65-1	4,4'-Thiodianiline
1314-20-1	Thorium dioxide
95-80-7	2,4-Toluene diamine
584-84-9	2,4-Toluene diisocyanate
95-53-4	o-Toluidine
636-21-5	o-Toluidine hydrochloride
8001-35-2	Toxaphene
55738-54-0	Trans-2((Dimethylamino)methylimino)-5-(2-(5-nitro-2-furyl) vinyl-1,3,4-oxadiazole
79-01-6	Trichloroethylene
88-06-2	2,4,6-Trichlorophenol
75-01-4	Vinyl chloride

(2) TABLE II
CLASS A TOXIC AIR POLLUTANTS
WITH ESTABLISHED
ACCEPTABLE SOURCE IMPACT LEVELS

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
75-07-0	Acetaldehyde	0.4500000
79-06-1	Acrylamide	0.0007700
107-13-1	Acrylonitrile	0.0150000
309-00-2	Aldrin	0.0002000
62-53-3	Aniline	6.3000000
C7440-38-2	Arsenic and inorganic arsenic compounds	0.0002300
1332-21-4	Asbestos (Note: fibers/ml)	0.0000044
71-43-2	Benzene	0.1200000
92-87-5	Benzidine and its salts	0.0000150
50-32-8	Benzo(a)pyrene	0.0004800
7440-41-7	Beryllium and compounds	0.0004200
111-44-4	Bis(2-chloroethyl)ether	0.0030000
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	2.5000000
542-88-1	Bis(chloromethyl)ether	0.0000160
75-25-2	Bromoform	0.9100000
106-99-0	1,3-Butadiene	0.0036000
7440-43-9	Cadmium and compounds	0.0005600
56-23-5	Carbon tetrachloride	0.0670000
57-74-9	Chlordane	0.0027000
510-15-6	Chlorobenzilate	0.2000000
67-66-3	Chloroform	0.0430000
108-43-0	Chlorophenols	0.1800000
C7440-47-3	Chromium, hexavalent metal and compounds	0.0000830
——	Coke oven emissions	0.0016000
3547-04-4	DDE (p,p'-dichlorodiphenyldichloroethylene)	0.1000000
50-29-3	DDT (1,1,1 Trichloro-2,2-Bis-(p-chlorophenyl)-ethane)	0.0100000
764-41-0	1,4-Dichloro-2-butene	0.0003800
106-46-7	1,4-Dichlorobenzene	1.5000000
91-94-1	3,3'-Dichlorobenzidine	0.0770000
107-06-2	1,2-Dichloroethane (ethylene chloride)	0.0380000
75-09-2	Dichloromethane (methylene chloride)	0.5600000
60-57-1	Dieldrin	0.0002200
119-93-7	3,3-Dimethyl benzidine	0.0038000
123-91-1	1,4-Dioxane	0.0320000
122-66-7	1,2-Diphenylhydrazine	0.0045000
106-89-8	Epichlorohydrin	0.8300000
106-93-4	Ethylene dibromide (dibromethane)	0.0045000
75-21-8	Ethylene oxide	0.0100000
96-45-7	Ethylene thiourea	1.0000000
50-00-0	Formaldehyde	0.0770000
76-44-8	Heptachlor	0.0007700
118-74-1	Hexachlorobenzene	0.0022000
58-89-9	Hexachlorocyclohexane (Lindane) gamma BHC	0.0026000
302-01-2	Hydrazine	0.0002000

CAS #	SUBSTANCE	10-6 RISK ASIL MICRO-GRAMS/M^3 ANNUAL AVERAGE
C7440-02-0	Nickel and compounds (as nickel subsulfide or nickel refinery dust)	0.0021000
924-16-3	N-Nitrosodi-n-butylamine	0.0006300
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine)(DEN)	0.0000230
62-75-9	N-Nitrosodimethylamine	0.0000710
79-46-9	2-Nitropropane	0.0003700
87-86-5	Pentachlorophenol	0.3300000
127-18-4	Perchloroethylene (tetrachloroethylene)	1.1000000
1336-36-3	Polychlorinated biphenyls (PCB)	0.0045000
75-56-9	Propylene oxide	0.2700000
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	0.00000003
95-80-7	2,4-Toluene diamine	0.0110000
95-53-4	o-Toluidine	0.1400000
636-21-5	o-Toluidine hydrochloride	0.1400000
8001-35-2	Toxaphene	0.0031000
79-01-6	Trichloroethylene	0.5900000
88-06-2	2,4,6-Trichlorophenol	0.3200000
75-01-4	Vinyl chloride	0.0120000

(3) TABLE III
CLASS A TOXIC AIR POLLUTANTS
WITH SPECIAL ACCEPTABLE SOURCE
IMPACT LEVELS

CAS #	SUBSTANCE	ASIL MICRO-GRAMS/M^3	AVERAGING TIME
——	Primary aluminum smelter uncontrolled roof vent polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.0013	Annual
61-82-5	Amitrole	0.06	24 hour
90-04-0	o-Anisidine	1.7	24 hour
126-99-8	β-Chloroprene	120	24 hour
94-75-7	2,4-D and esters	33	24 hour
78-87-5	1,2-Dichloropropane	4.0	24 hour
77-78-1	Dimethyl sulfate	1.7	24 hour
540-73-8	1,2-Dimethylhydrazine	4.0	24 hour
319-84-6	Hexachlorocyclohexane (Lindane) alpha BHC	1.7	24 hour
319-85-7	Hexachlorocyclohexane (Lindane) beta BHC	1.7	24 hour
——	Lead compounds	0.5	24 hour
101-14-4	4,4'-Methylenebis (2-Chloroaniline) (MBOCA)	0.7	24 hour
101-77-9	4,4-Methylene dianiline	2.7	24 hour
——	Polyaromatic hydrocarbon (PAH) emissions (Note: Quantify according to WAC 173-460-050 (4)(d))	0.00048	Annual
584-84-9	2,4-Toluene diisocyanate	0.12	24 hour

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-150, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-150, filed 6/18/91, effective 9/18/91.]

WAC 173-460-160 Class B toxic air pollutants and acceptable source impact levels. The following table lists Class B toxic air pollutants and acceptable source impact levels:

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
86-88-4	ANTU	1.0
60-35-5	Acetamide	——
64-19-7	Acetic acid	83
108-24-7	Acetic anhydride	67
67-64-1	Acetone	5900
75-05-8	Acetonitrile	220
98-86-2	Acetophenone	——
79-27-6	Acetylene tetrabromide	47
107-02-8	Acrolein	0.02
79-10-7	Acrylic acid	0.30
107-18-6	Allyl alcohol	17
107-05-1	Allyl chloride	1.0
106-92-3	Allyl glycidyl ether (AGE)	77
2179-59-1	Allyl propyl disulfide	40.0
C7429-90-5	Aluminum, Al alkyls	6.7
7429-90-5	Aluminum, as AL metal dust	33
C7429-90-5	Aluminum, as AL pyro powders	17
C7429-90-5	Aluminum, as Al soluble salts	6.7
C7429-90-5	Aluminum, as Al welding fumes	17
504-29-0	2-Aminopyridine	6.3
7664-41-7	Ammonia	100
12125-02-9	Ammonium chloride fume	33
3825-26-1	Ammonium perfluorooctanoate	0.33
7773-06-0	Ammonium sulfamate	33
628-63-7	n-Amyl acetate	1800
626-38-0	sec-Amyl acetate	2200
62-53-3	Aniline & homologues	1.0
29191-52-4	Anisidine (o-,p- isomers)	1.7
C7440-36-0	Antimony & compounds as Sb	1.7
1309-64-4	Antimony trioxide, as Sb	l.7
7784-42-1	Arsine	0.53
8052-42-4	Asphalt (petroleum) fumes	17
1912-24-9	Atrazine	17
86-50-0	Azinphos-methyl	0.67
C7440-39-3	Barium, soluble compounds Ba	1.7
17804-35-2	Benomyl	33
98-07-7	Benzotrichloride	——
94-36-0	Benzoyl Peroxide	17
100-44-7	Benzyl chloride	17
92-52-4	Biphenyl	4.3
1304-82-1	Bismuth telluride	33
1304-82-1	Bismuth telluride Se doped	17
C1303-96-4	Borates, anhydrous	3.3
C1303-96-4	Borates, decahydrate	17
C1303-96-4	Borates, pentahydrate	3.3
1303-86-2	Boron oxide	33
10294-33-4	Boron tribromide	33
76737-07-2	Boron trifluoride	9.3
314-40-9	Bromacil	33
7726-95-6	Bromine	2.2
7789-30-2	Bromine pentafluoride	2.4
106-97-8	Butane	6300.0
111-76-2	2-Butoxyethanol	400
123-86-4	n-Butyl acetate	2400
105-46-4	sec-Butyl acetate	3200
540-88-5	tert-Butyl acetate	3200
141-32-2	Butyl acrylate	170
71-36-3	n-Butyl alcohol	500
78-92-2	sec-Butyl alcohol	1000
75-65-0	tert-Butyl alcohol	1000
1189-85-1	tert-Butyl chromate, as CrO3	0.33
2426-08-6	n-Butyl glycidyl ether (BGE)	440
138-22-7	n-Butyl lactate	83
109-79-5	n-Butyl mercaptan	6.0
109-73-9	n-Butylamine	50.0

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
89-72-5	o-sec-Butylphenol	100
98-51-1	p-tert-Butyltoluene	200
156-62-7	Calcium cyanamide	1.7
1305-62-0	Calcium hydroxide	17
1305-78-8	Calcium oxide	6.7
76-22-2	Camphor, synthetic	40
105-60-2	Caprolactam, dust	3.3
105-60-2	Caprolactam, vapor	67
2425-06-1	Captafol	0.33
133-06-2	Captan	17
63-25-2	Carbaryl	17
1563-66-2	Carbofuran	0.33
1333-86-4	Carbon black	12
75-15-0	Carbon disulfide	100
558-13-4	Carbon tetrabromide	4.7
353-50-4	Carbonyl fluoride	18
463-58-1	Carbonyl sulfide	——
120-80-9	Catechol	77
21351-79-1	Cesium hydroxide	6.7
133-90-4	Chloramben	——
55720-99-5	Chlorinated diphenyl oxide (hexachlorophenyl ether)	1.7
7782-50-5	Chlorine	5.0
10049-04-4	Chlorine dioxide	0.2
7790-91-2	Chlorine trifluoride	1.3
600-25-9	1-Chloro-1-nitropropane	33
107-20-0	Chloroacetaldehyde	11
79-11-8	Chloroacetic acid	——
532-27-4	a-Chloroacetophenone	1.1
79-04-9	Chloroacetyl chloride	0.67
2698-41-1	o-Chlorobenylidene malonitrile	1.3
108-90-7	Chlorobenzene	150
74-97-5	Chlorobromomethane	3500
75-45-6	Chlorodifluoromethane	12000
76-15-3	Chloropentafluoroethane	21000
76-06-2	Chloropicrin	2.2
2039-87-4	o-Chlorostyrene	940
95-49-8	o-Chlorotoluene	860
2921-88-2	Chlorpyrifos	0.67
C7440-47-3	Chromium (II) compounds, as Cr	1.7
C7440-47-3	Chromium (III) compounds, Cr	1.7
7440-47-3	Chromium (metal)	1.7
14977-61-8	Chromyl chloride	0.53
2971-90-6	Clopidol	33
7440-48-4	Cobalt as Co metal Dust and fume	0.17
10210-68-1	Cobalt carbonyl as Co	0.33
16842-03-8	Cobalt hydrocarbonyl	0.33
C7440-50-8	Copper, Dusts and mists, as Cu	3.3
7440-50-8	Copper, Fume	0.67
—	Cotton dust, raw	0.67
1319-77-3	Cresol, all isomers	73
4170-30-3	Crotonaldehyde	20
299-86-5	Crufomate	17
98-82-2	Cumene	820
420-04-2	Cyanamide	6.7
51-12-5	Cyanides, as CN	17
460-19-5	Cyanogen	67
506-77-4	Cyanogen chloride	2.5
110-82-7	Cyclohexane	3400
108-93-0	Cyclohexanol	690
108-94-1	Cyclohexanone	330
110-83-8	Cyclohexene	3400
108-91-8	Cyclohexylamine	140
121-82-4	Cyclonite	5.0
542-92-7	Cyclopentadiene	680

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
287-92-3	Cyclopentane	5700
13121-70-5	Cyhexatin	17
17702-41-9	Decaborane	0.83
8065-48-3	Demeton	0.37
123-42-2	Diacetone alcohol	790
333-41-5	Diazinon	0.33
334-88-3	Diazomethane	1.1
19287-45-7	Diborane	0.37
96-12-8	1,2-Dibromo-3-chloropropane	0.20
107-66-4	Dibutyl phosphate	29
84-74-2	Dibutyl phthalate	17
102-81-8	2-N-Dibutylaminoethanol	47
594-72-9	1,1-Dichloro-1-nitroethane	40
118-52-5	1,3-Dichloro-5,5-Dimethyl hydantoin	0.67
7572-29-4	Dichloroacetylene	1.3
95-50-1	o-Dichlorobenzene (1,2-Dichlorobenzene)	1000
75-71-8	Dichlorodifluoromethane	16000
75-34-3	1,1-Dichloroethane	2700
540-59-0	1,2-Dichloroethylene	2600
75-43-4	Dichlorofluoromethane	130
542-75-6	Dichloropropene	20
75-99-0	2,2-Dichloropropionic acid	19
76-14-2	Dichlorotetrafluoroethane	23000
62-73-7	Dichlorvas	3.3
141-66-2	Dicrotophos	0.83
77-73-6	Dicyclopentadiene	100
102-54-5	Dicyclopentadienyl iron	33
111-42-2	Diethanolamine	43
96-22-0	Diethyl ketone	2300
84-66-2	Diethyl phthalate	17
64-67-5	Diethyl sulfate	——
109-89-7	Diethylamine	100
100-37-8	Diethylaminoethanol	170
111-40-0	Diethylene triamine	14
75-61-6	Difluorodibromomethane	2900
2238-07-5	Diglycidyl ether	1.7
108-83-8	Diisobutyl ketone	480
108-18-9	Diisopropylamine	67
127-19-5	Dimethyl acetamide	120
60-11-7	Dimethyl aminoazobenzene	——
79-44-7	Dimethyl carbamoyl chloride	——
124-40-3	Dimethylamine	60
121-69-7	Dimethylaniline	83
68-12-2	Dimethylformamide	30
57-14-7	1,1-Dimethylhydrazine	4.0
131-11-3	Dimethylphthalate	17
148-01-6	Dinitolmide	17
534-52-1	Dinitro-o-cresol	0.67
528-29-0	Dinitrobenzene, all isomers	3.3
51-28-5	2,4-Dinitrophenol	——
121-14-2	2,4-Dinitrotoluene	5.0
78-34-2	Dioxathion	0.67
122-39-4	Diphenylamine	33
123-19-3	Dipropyl ketone	780
34590-94-8	Dipropylene glycol methyl ether	2000
85-00-7	Diquat	1.7
97-77-8	Disulfiram	6.7
298-04-4	Disulfuton	0.33
128-37-0	2,6-Ditert. butyl-p-cresol	33
330-54-1	Diuron	33
1321-74-0	Divinyl benzene	180
2104-64-5	EPN	1.7
115-29-7	Endosulfan	0.33
72-20-8	Endrin	0.33
13838-16-9	Enflurane	1900

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
106-88-7	1,2-Epoxybutane	20
141-43-5	Ethanolamine	25
563-12-2	Ethion	1.3
110-80-5	2-Ethoxyethanol	200
111-15-9	2-Ethoxyethyl acetate	90
141-78-6	Ethyl acetate	4800
140-88-5	Ethyl acrylate	66
64-17-5	Ethyl alcohol	6300
541-85-5	Ethyl amyl ketone	440
100-41-4	Ethyl benzene	1000
74-96-4	Ethyl bromide	3000
106-35-4	Ethyl butyl ketone	780
51-79-5	Ethyl carbamate	——
75-00-3	Ethyl chloride	10000
60-29-7	Ethyl ether	4000
109-94-4	Ethyl formate	1000
75-08-1	Ethyl mercaptan	4.3
78-10-4	Ethyl silicate	280
75-04-7	Ethylamine	60
107-07-3	Ethylene chlorohydrin	11
107-15-3	Ethylene diamine	83
107-21-1	Ethylene glycol	420
628-96-6	Ethylene glycol dinitrate	1.0
151-56-4	Ethylenimine	2.9
16219-75-3	Ethylidene norbornene	83
100-74-3	N-Ethylmorpholine	77
22224-92-6	Fenamiphos	0.33
115-90-2	Fensulfothion	0.33
55-38-9	Fenthion	0.67
14484-64-1	Ferbam	33
12604-58-9	Ferrovanadium dust	3.3
—	Fibrous glass dust	33
—	Fine mineral fibers	33
16984-48-8	Fluorides, as F	8.3
7782-41-4	Fluorine	5.3
944-22-9	Fonofos	0.33
75-12-7	Formamide	60
64-18-6	Formic acid	31
98-01-1	Furfural	26
98-00-1	Furfuryl alcohol	130
7782-65-2	Germanium tetrahydride	2.1
111-30-8	Glutaraldehyde	2.5
556-52-5	Glycidol	250
—	Glycol ethers	——
7440-58-6	Hafnium	1.7
151-67-7	Halothane	1300
142-82-5	Heptane (n-Heptane)	5500
87-68-3	Hexachlorobutadiene	0.70
77-47-4	Hexachlorocyclopentadiene	0.33
67-72-1	Hexachloroethane	32
1335-87-1	Hexachloronaphthalene	0.67
684-16-2	Hexafluoroacetone	2.3
822-06-0	Hexamethylene diisocyanate	0.11
100-54-3	Hexane (n-Hexane)	200
—	Hexane, other isomers	5900
591-78-6	2-Hexanone (MBK)	67
108-84-9	sec-Hexyl acetate	980
107-41-5	Hexylene glycol	400
10035-10-6	Hydrogen bromide	33
7647-01-0	Hydrogen chloride	7.0
74-90-8	Hydrogen cyanide	37
7664-39-3	Hydrogen fluoride, as F	8.7
7722-84-1	Hydrogen peroxide	4.7
7783-07-5	Hydrogen selenide, as Se	0.53
7783-06-4	Hydrogen sulfide	0.9

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
123-31-9	Hydroquinone	6.7
999-61-1	2-Hydroxypropyl acrylate	9.3
95-13-6	Indene	160
C7440-74-6	Indium, & compounds as In	0.33
7553-56-2	Iodine	3.3
75-47-8	Iodoform	33
1309-37-1	Iron oxide fume, Fe_2O_3 as Fe	17
13463-40-6	Iron pentacarbonyl, as Fe	0.83
—	Iron salts, soluble as Fe	3.3
123-92-2	Isoamyl acetate	1700
123-51-3	Isoamyl alcohol	1200
110-19-0	Isobutyl acetate	2400
78-83-1	Isobutyl alcohol	510
26952-21-6	Isocytl alcohol	890
78-59-1	Isophorone	93
4098-71-9	Isophorone diisocyanate	0.15
109-59-1	Isopropoxyethanol	350
108-21-4	Isopropyl acetate	3500
67-63-0	Isopropyl alcohol	3300
108-20-3	Isopropyl ether	3500
4016-14-2	Isopropyl glycidyl ether (IGE)	790
75-31-0	Isopropylamine	40
768-52-5	N-Isopropylaniline	37
463-51-4	Ketene	2.9
3687-31-8	Lead arsenate, as $Pb_3 (A_2O_4)_2$	0.50
7758-97-6	Lead chromate, as Cr	0.040
68476-85-7	Liquified petroleum gas	6000
7580-67-8	Lithium hydride	0.080
1309-48-4	Magnesium oxide fume	33
121-75-5	Malathion	33
108-31-6	Maleic anhydride	3.3
C7439-96-5	Manganese dust & compounds	0.40
C7439-96-5	Manganese fume	3.3
12079-65-1	Manganese cyclopentadienyl tricarbonyl	0.33
C7439-97-6	Mercury, Aryl & inorganic cmpd	0.33
C7439-97-6	Mercury, as Hg Alkyl compounds	0.33
C7439-97-6	Mercury, vapors except alkyl	0.17
141-79-7	Mesityl oxide	200
79-41-4	Methacrylic acid	230
16752-77-5	Methomyl	8.3
72-43-5	Methoxychlor	33
109-86-4	2-Methoxyethanol	20
110-49-6	2-Methoxyethyl acetate	80
150-76-5	4-Methoxyphenol	17
137-05-3	Methyl 2-cyanoacrylate	30
79-20-9	Methyl acetate	2000
74-99-7	Methyl acetylene	5500
59355-75-8	Methyl acetylene-propadiene mixture (MAPP)	5500
96-33-3	Methyl acrylate	120
67-56-1	Methyl alcohol	870
100-61-8	N-Methyl aniline	7.3
74-83-9	Methyl bromide	5.0
74-87-3	Methyl chloride	340
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	6400
8022-00-2	Methyl demeton	1.7
78-93-3	Methyl ethyl ketone (MEK)	1000
1338-23-4	Methyl ethyl ketone peroxide	5.0
107-31-3	Methyl formate	820
60-34-4	Methyl hydrazine	1.2
74-88-4	Methyl iodide	40
110-12-3	Methyl isoamyl ketone	780
108-11-2	Methyl isobutyl carbinol	350
108-10-1	Methyl isobutyl ketone (MIBK)	680
624-83-9	Methyl isocyanate	0.16

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
563-80-4	Methyl isopropyl ketone	2300
74-93-1	Methyl mercaptan	3.3
80-62-6	Methyl methacrylate	1400
110-43-0	Methyl n-amyl ketone	780
591-78-6	Methyl n-butyl ketone	67
298-00-0	Methyl parathion	0.67
107-87-9	Methyl propyl ketone	2300
681-84-5	Methyl silicate	20
1634-04-4	Methyl tert-butyl ether	500
98-83-9	a-Methyl styrene	810
126-98-7	Methylacrylonitrile	9.0
109-87-5	Methylal	10000
74-89-5	Methylamine	43
108-87-2	Methylcyclohexane	5400
25639-42-3	Methylcyclohexanol	780
583-60-8	o-Methylcyclohexanone	760
12108-13-3	Methylcyclopentadienyl manganese tricarbonyl	0.67
5124-30-1	Methylene bis (4-cyclo-hexylisocyanate)	0.18
101-68-8	Methylene bis(phenyl isocyanate)	0.2
21087-64-9	Metribuzin	17
7786-34-7	Mevinphos	0.33
C7439-98-7	Molybdenum, as Mo soluble cpds	17
C7439-98-7	Molybdenum, insoluble cpds	33
6923-22-4	Monocrotophos	0.83
110-91-8	Morpholine	240
300-76-5	Naled	10
91-20-3	Napthalene	170
54-11-5	Nicotine	1.7
1929-82-4	Nitrapyrin	33
7697-37-2	Nitric acid	17
10102-43-9	Nitric oxide	100
100-01-6	p-Nitroaniline	10
98-95-3	Nitrobenzene	1.7
100-00-5	p-Nitrochlorobenzene	2.0
79-24-3	Nitroethane	1000
7783-54-2	Nitrogen trifluoride	97
92-93-3	4-Nitrobiphenyl	——
55-63-0	Nitroglycerin	1.5
75-52-5	Nitromethane	830
100-02-7	4-Nitrophenol	——
108-03-2	1-Nitropropane	20
684-93-5	N-Nitroso-N-methylurea	——
88-72-2	Nitrotoluene	37
111-84-2	Nonane	3500
2234-13-1	Octachloronaphthalene	0.33
111-65-9	Octane	4700
8012-95-1	Oil mist, mineral	17
20816-12-0	Osmium tetroxide, as Os	0.0053
144-62-7	Oxalic acid	3.3
7783-41-7	Oxygen difluoride	0.37
8002-74-2	Parafin wax fume	6.7
4685-14-7	Paraquat	4.5
56-38-2	Parathion	0.33
19624-22-7	Pentaborane	0.043
1321-64-8	Pentachloronaphthalene	1.7
82-68-8	Pentachloronitrobenzene (quintobenzene)	1.7
109-66-0	Pentane	6000
594-42-3	Perchloromethyl mercaptan	2.5
7616-94-6	Perchloryl fluoride	43
108-95-2	Phenol	63
92-84-2	Phenothiazine	1.7
101-84-8	Phenyl ether	23
122-60-1	Phenyl glycidyl ether	2000
108-98-5	Phenyl mercaptan	7.7

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
106-50-3	p-Phenylenediamine	0.33
100-63-0	Phenylhydrazine	1.5
638-21-1	Phenylphosphine	0.77
298-02-2	Phorate	0.17
75-44-5	Phosgene	1.3
7803-51-2	Phosphine	1.3
7664-38-2	Phosphoric acid	3.3
7723-14-0	Phosphorus	0.33
10025-87-3	Phosphorus oxychloride	2.1
10026-13-8	Phosphorus pentachloride	2.8
1314-80-3	Phosphorus pentasulfide	3.3
7719-12-2	Phosphorus trichloride	3.7
85-44-9	Phthalic anhydride	20
626-17-5	m-Phthalodinitrile	17
1918-02-1	Picloram	33
88-89-1	Picric acid	0.33
83-26-1	Pindone	0.033
142-64-3	Piperazine dihydrochloride	17
7440-06-4	Platinum, Metal	3.3
C7440-06-4	Platinum, Soluble salts as Pt	0.0067
1310-58-3	Potassium hydroxide	6.7
107-19-7	Propargyl alcohol	7.7
57-57-8	B-Propiolactone	5.0
123-38-6	Propionaldehyde	——
114-26-1	Propoxur	1.7
79-09-4	Propionic acid	100
109-60-4	n-Propyl acetate	2800
71-23-8	n-Propyl alcohol	1600
627-13-4	n-Propyl nitrate	360
6423-43-4	Propylene glycol dinitrate	1.1
107-98-2	Propylene glycol monomethyl ether	2000
75-55-8	Propylene imine	16
8003-34-7	Pyrethrum	1.7
110-86-1	Pyridine	53
91-22-5	Quinoline	——
106-51-4	Quinone	1.5
108-46-3	Resorcinol	150
7440-16-6	Rhodium Metal	3.3
C7440-16-6	Rhodium, Insoluble compounds	3.3
C7440-16-6	Rhodium, Soluble compounds	0.033
299-84-3	Ronnel	33
83-79-4	Rotenone	17
—	Rubber solvent (Naphtha)	5300
C7782-49-2	Selenium compounds, as Se	0.67
7783-79-1	Selenium hexafluoride, as Se	0.53
136-78-7	Sesone	33
7803-62-5	Silicon tetrahydride	22
7440-22-4	Silver, Metal	0.33
C7440-22-4	Silver, soluble compounds as Ag	0.033
26628-22-8	Sodium azide	1.0
7631-90-5	Sodium bisulfite	17
62-74-8	Sodium fluoroacetate	0.17
1310-73-2	Sodium hydroxide	6.7
7681-57-4	Sodium metabisulfite	17
7803-52-3	Stibine	1.7
57-24-9	Strychnine	0.5
100-42-5	Styrene	1000
96-9-3	Styrene oxide	——
1395-21-7	Subtilisins	0.0002
3689-24-5	Sulfotep	0.67
2551-62-4	Sulfur hexafluoride	20000
10025-67-9	Sulfur monochloride	18
5714-22-7	Sulfur pentafluoride	0.33
7783-60-0	Sulfur tetrafluoride	1.5
7664-93-9	Sulfuric acid	3.3

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
2699-79-8	Sulfuryl fluoride	67
35400-43-2	Sulprofos	3.3
93-76-5	2,4,5-T	33
107-49-3	TEPP	0.16
C7440-25-7	Tantalum, metal & oxide dusts	17
C13494-80-9	Tellurium & compounds as Te	0.33
7783-80-4	Tellurium hexafluoride, as Te	0.33
3383-96-8	Temephos	33
26140-60-3	Terphenyls	16
76-12-0	1,1,2,2-Tetrachloro-1,2-difluoroethane	14000
76-11-9	1,1,1,2-Tetrachloro-2,2-difluoroethane	14000
79-34-5	1,1,2,2-Tetrachloroethane	23
1335-88-2	Tetrachloronaphthalene	6.7
78-00-2	Tetraethyl lead, as Pb	0.33
109-99-9	Tetrahydrofuran	2000
75-74-1	Tetramethyl lead, as Pb	0.5
3333-52-6	Tetramethyl succinonitrile	9.3
509-14-8	Tetranitromethane	27
7722-88-5	Tetrasodium pyrophosphate	17
479-45-8	Tetryl	5.0
C7440-28-0	Thallium, soluble compounds, Tl	0.33
96-69-5	4,4-Thiobis(6-tert, butyl-m-cresol)	33
68-11-1	Thioglycolic acid	13
7719-09-7	Thionyl chloride	16
137-26-8	Thiram	3.3
7440-31-5	Tin, Metal	6.7
C7440-31-5	Tin, Organic compounds, as Sn	0.33
7440-31-5	Tin, oxide & inorganic except SnH_4	6.7
7550-45-0	Titanium tetrachloride	——
108-88-3	Toluene	400
108-44-1	m-Toluidine	29
106-49-0	p-Toluidine	29
126-73-8	Tributyl phosphate	7.3
76-13-1	1,1,2-Trichloro-1,2,2-trifluorethane	27000
76-03-9	Trichloroacetic acid	22
120-82-1	1,2,4-Trichlorobenzene	120
79-00-5	1,1,2-Trichloroethane	180
75-69-4	Trichlorofluoromethane	19000
1321-65-9	Trichloronaphthalene	17
95-95-4	2,4,5-Trichlorophenol	——
96-18-4	1,2,3-Trichloropropane	200
121-44-8	Triethylamine	7.0
75-63-8	Trifluorobromomethane	20000
1582-09-8	Trifluralin	——
552-30-7	Trimellitic anhydride	0.13
2551-13-7	Trimethyl benzene	420
540-84-1	2,2,4-Trimethylpentane	——
121-45-9	Trimethyl phosphite	33
75-50-3	Trimethylamine	80
118-96-7	2,4,6-Trinitrotoluene	1.7
78-30-8	Triorthocresyl phosphate	0.33
603-34-9	Triphenyl amine	17
115-86-6	Triphenyl phosphate	10
C7440-33-7	Tungsten, Insoluble compounds	17
C7440-33-7	Tungsten, Soluble compounds	3.3
8006-64-2	Turpentine	1900
C7440-61-1	Uranium, insoluble & soluble	0.67
8032-32-4	VM & P Naphtha	4600
110-62-3	n-Valeraldehyde	590
1314-62-1	Vanadium, as V_2O_5	0.17
108-05-4	Vinyl acetate	200
593-60-2	Vinyl bromide	73
106-87-6	Vinyl cyclohexene dioxide	200
75-35-4	Vinylidene chloride	67
25013-15-4	Vinyl toluene	800

CLASS B TOXIC AIR POLLUTANTS AND ACCEPTABLE SOURCE IMPACT LEVELS

CAS#	SUBSTANCE	ASIL MICRO-GRAMS/M^3 TWENTY-FOUR-HOUR AVERAGE
81-81-2	Warfarin	0.33
—	Welding fumes	17
1477-55-0	m-Xylene a,a'-diamine	0.33
1330-20-7	Xylenes (m-,o-,p-isomers)	1500
1300-73-8	Xylidine	8.3
C7440-65-5	Yttrium, metal and cpds as Y	3.3
7646-85-7	Zinc chloride fume	3.3
13530-65-9	Zinc chromates	0.033
1314-13-2	Zinc oxide, fume	17
C7440-67-7	Zirconium compounds, as Zr	17

[Statutory Authority: Chapter 70.94 RCW. 94-03-072 (Order 93-19), § 173-460-160, filed 1/14/94, effective 2/14/94. Statutory Authority: RCW 70.94.331. 91-13-079 (Order 90-62), § 173-460-160, filed 6/18/91, effective 9/18/91.]