

Appendix E

Final Rule Text for

WAC 173-460 and WAC 173-400-110

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AMENDATORY SECTION (Amending Order 06-03, filed 5/8/07, effective 6/8/07)

(1) Applicability.

WAC 173-400-110 New source review (NSR). In lieu of filing a

(a) This section, WAC 173-400-112 and 173-400-113 apply statewide except where an authority has adopted its own new source review rule.

(b) This section applies to sources as defined in RCW 70.94.030 ~~((21))~~ (22), but does not include nonroad engines. Nonroad engines are regulated under WAC 173-400-035.

(2) Projects subject to NSR -notice of construction application.

(a) A notice of construction application must be filed by the owner or operator and an order of approval issued by the permitting authority prior to ~~((the establishment))~~ beginning actual construction of any new source, except for the following:

(i) Those sources exempt under subsection (4) or (5) of this section; and

(ii) A source regulated under WAC 173-400-035.

For purposes of this section ~~(("establishment" shall mean to begin actual construction, as that term is defined in WAC 173-400-030, and))~~ "new source" ~~((shall))~~ includes any modification to an existing stationary source, as defined in WAC 173-400-030, and any new or modified toxic air pollutant source, as defined in WAC 173-460-020.

(b) Regardless of any other subsection of this section, a notice of construction application must be filed and an order of approval issued by the permitting authority prior to ~~((establishment))~~ beginning actual construction of any of the following new sources:

(i) Any project that qualifies as construction, reconstruction or modification of an affected facility, within the meaning of 40 CFR Part 60 (New Source Performance Standards), except ~~((Part))~~ subpart AAA, Wood stoves ~~((in effect on February 20, 2001))~~ and except subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) and subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) as they apply to emergency stationary internal combustion engines with a maximum engine power less than or equal to 500 brake horsepower (federal rules in effect on April 30, 2008);

notice of construction application under this section, the owner or operator may apply for coverage under an applicable general order of approval issued under WAC 173-400-560. Coverage under a general order of approval satisfies the requirement for new source review under RCW 70.94.152.

[1] OTS-1835.4

(ii) Any project that qualifies as a new or modified source within the meaning of 40 CFR 61.02 (National Emission Standards for Hazardous Air Pollutants) (in effect on July 1, 2004), except for asbestos demolition and renovation projects subject to 40 CFR 61.145, and except from sources or emission units emitting only radionuclides, which are required to obtain a license under WAC 246-247-060, and are subject to 40 CFR Part 61, subparts H and/or I;

(iii) Any project that qualifies as a new source within the meaning of 40 CFR 63.2 (National Emission Standards for Hazardous Air Pollutants for Source Categories) ~~((in effect on October 1, 2006))~~ except subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) as it applies to emergency or limited use stationary reciprocating internal combustion engines with a maximum engine power less than or equal to 500 brake horsepower (federal rules in effect on April 30, 2008);

(iv) Any project that qualifies as a new major stationary source, or a major modification to a major stationary source subject to the requirements of WAC 173-400-112;

(v) Any modification to a stationary source that requires an increase either in a plant-wide cap or in a unit specific emission limit.

(c) An applicant filing a notice of construction application for a project described in WAC 173-400-117(2), Special protection requirements for Class I areas, must send a copy of the application to the responsible federal land manager.

(3) **Modifications.** New source review of a modification ~~((shall be))~~ is limited to the emission unit or units proposed to be added to an existing source or modified and the air contaminants whose emissions would increase as a result of the modification; provided, however, that review of a major modification must comply with WAC 173-400-112 and/or 173-400-720, as applicable.

(4) Emission unit and activity exemptions.

Except as provided in subsection (2) of this section, ~~((establishment of a new emission unit that falls within))~~ the construction or modification of emission units in one of the categories listed below is exempt from new source review ~~((Modification of any emission unit listed below is exempt from new source review))~~, provided that the modified unit continues to fall within one of the listed categories. The ~~((installation))~~ construction or modification of ~~((a))~~ an emission unit exempt under this subsection does not require the filing of a notice of construction application.

(a) Maintenance/construction:

(i) Cleaning and sweeping of streets and paved surfaces;

(ii) Concrete application, and installation;

(iii) Dredging wet spoils handling and placement;

(iv) Paving application and maintenance, excluding asphalt plants;

(v) Plant maintenance and upkeep activities (grounds keeping, general repairs, routine house keeping, routine plant painting,

welding, cutting, brazing, soldering, plumbing, retarring roofs, etc.);

(vi) Plumbing installation, plumbing protective coating application and maintenance activities;

(vii) Roofing application;

(viii) Insulation application and maintenance, excluding products for resale;

(ix) Janitorial services and consumer use of janitorial products.

(b) Storage tanks:

Note: It can be difficult to determine requirements for storage tanks. Ecology strongly recommends that an owner or operator contact the permitting authority to determine the exemption status of storage tanks prior to their installation.

(i) Lubricating oil storage tanks except those facilities that are wholesale or retail distributors of lubricating oils;

(ii) Polymer tanks and storage devices and associated pumping and handling equipment, used for solids dewatering and flocculation;

(iii) Storage tanks, reservoirs, pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions;

(iv) Process and white water storage tanks;

(v) Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than 260 gallon capacity (35 cft);

(vi) Operation, loading and unloading of storage tanks, # 1100 gallon capacity, with lids or other appropriate closure, not for use with materials containing toxic air pollutants, as defined in chapter 173-460 WAC, max. VP 550 mm Hg @21EC;

(vii) Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons;

(viii) Tanks, vessels and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids.

(c) A project with combined aggregate heat inputs of combustion units (excluding emergency engines exempted by subsection (4)(h)(xxxix) of this section), # all of the following:

(i) # 500,000 Btu/hr using coal with # 0.5% sulfur or other fuels with # 0.5% sulfur;

(ii) # 500,000 Btu/hr used oil, per the requirements of RCW 70.94.610;

(iii) # 400,000 Btu/hr wood waste or paper;

(iv) ((<)) # 1,000,000 Btu/hr using kerosene, #1, or #2 fuel oil and with #0.05% sulfur;

(v) # 4,000,000 Btu/hr using natural gas, propane, or LPG.

(d) Material handling:

(i) Continuous digester chip feeders;

(ii) Grain elevators not licensed as warehouses or dealers by either the Washington state department of agriculture or the U.S. Department of Agriculture;

(iii) Storage and handling of water based lubricants for metalworking where organic content of the lubricant is # 10%;

(iv) Equipment used exclusively to pump, load, unload, or store high boiling point organic material in tanks less than one million gallon, material with initial atmospheric boiling point not less than 150°C or vapor pressure not more than 5 mm Hg @21°C, with lids or other appropriate closure.

(e) Water treatment:

(i) Septic sewer systems, not including active wastewater treatment facilities;

(ii) NPDES permitted ponds and lagoons used solely for the purpose of settling suspended solids and skimming of oil and grease;

(iii) De-aeration (oxygen scavenging) of water where toxic air pollutants as defined in chapter 173-460 WAC are not emitted;

(iv) Process water filtration system and demineralizer vents;

(v) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment (vi) Demineralizer tanks;

(vii) Alum tanks;

(viii) Clean water condensate tanks.

(f) Environmental chambers and laboratory equipment:

(i) Environmental chambers and humidity chambers not using toxic air pollutant gases, as regulated under chapter 173-460 WAC;

(ii) Gas cabinets using only gases that are not toxic air pollutants regulated under chapter 173-460 WAC;

(iii) Installation or modification of a single laboratory fumehood;

(iv) Laboratory research, experimentation, analysis and testing at sources whose primary purpose and activity is research or education. To be exempt, these sources must not engage in the production of products, or in providing commercial services, for sale or exchange for commercial profit except in a de minimis manner. Pilot-plants or pilot scale processes at these sources are not exempt.

(v) Laboratory calibration and maintenance equipment.

(g) Monitoring/quality assurance/testing:

(i) Equipment and instrumentation used for quality control/assurance or inspection purpose;

(ii) Hydraulic and hydrostatic testing equipment;

(iii) Sample gathering, preparation and management;

(iv) Vents from continuous emission monitors and other analyzers.

(h) Miscellaneous:

(i) Single-family residences and duplexes;

(ii) Plastic pipe welding;

(iii) Primary agricultural production activities including soil preparation, planting, fertilizing, weed and pest control, and harvesting;

(iv) Comfort air conditioning;

(v) Flares used to indicate danger to the public;

(vi) Natural and forced air vents and stacks for bathroom/toilet activities;

(vii) Personal care activities;

- (viii) Recreational fireplaces including the use of barbecues, campfires, and ceremonial fires;
 - (ix) Tobacco smoking rooms and areas;
 - (x) Noncommercial smokehouses;
 - (xi) Blacksmith forges for single forges;
- (xii) Vehicle maintenance activities, not including vehicle surface coating;
- (xiii) Vehicle or equipment washing (see (c) of this subsection for threshold for boilers);
 - (xiv) Wax application;
- (xv) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment not including internal and external combustion equipment;
 - (xvi) Ozone generators and ozonation equipment;
 - (xvii) Solar simulators;
- (xviii) Ultraviolet curing processes, to the extent that toxic air pollutant gases as defined in chapter 173-460 WAC are not emitted;
- (xix) Electrical circuit breakers, transformers, or switching equipment installation or operation;
 - (xx) Pulse capacitors;
- (xxi) Pneumatically operated equipment, including tools and hand held applicator equipment for hot melt adhesives;
 - (xxii) Fire suppression equipment;
 - (xxiii) Recovery boiler blow-down tank;
 - (xxiv) Screw press vents;
- (xxv) Drop hammers or hydraulic presses for forging or metalworking;
- (xxvi) Production of foundry sand molds, unheated and using binders less than 0.25% free phenol by sand weight;
 - (xxvii) Kraft lime mud storage tanks and process vessels;
 - (xxviii) Lime grits washers, filters and handling;
 - (xxix) Lime mud filtrate tanks;
 - (xxx) Lime mud water;
- (xxxi) Stock cleaning and pressurized pulp washing down process of the brown stock washer;
- (xxxii) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities and transportation marketing facilities;
- (xxxiii) Nontoxic air pollutant, as defined in chapter 173-460 WAC, solvent cleaners less than 10 square feet air-vapor interface with solvent vapor pressure not more than 30 mm Hg @21°C;
- (xxxiv) Surface coating, aqueous solution or suspension containing # 1% (by weight) VOCs, and/or toxic air pollutants as defined in chapter 173-460 WAC;
- (xxxv) Cleaning and stripping activities and equipment using solutions having # 1% VOCs (by weight); on metallic substances, acid solutions are not exempt;
- (xxxvi) Dip coating operations, using materials less than 1% VOCs (by weight) and/or toxic air pollutants as defined in chapter 173-460 WAC.
- (xxxvii) Abrasive blasting performed inside a booth or hangar designed to capture the blast grit or overspray.

(xxxviii) For structures or items too large to be reasonably handled indoors, abrasive blasting performed outdoors that employs control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps and uses either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.

(xxxix) Emergency generators powered by internal combustion engines with a maximum power of less than or equal to 500 brake horsepower.

(xl) Gasoline dispensing facilities (GDFs) regulated by chapter 173-491 WAC.

(5) Exemptions based on emissions.

(a) Except as provided in subsection (2) of this section and in this subsection:

(i) Construction of a new emissions unit that has a potential to emit below each of the levels listed in the table contained in

(d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(ii) A modification to an existing emissions unit that increases the unit's actual emissions by less than each of the threshold levels listed in the table contained in (d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(b) The owner or operator seeking to exempt a project from new source review under this section (~~shall~~) must notify, and upon request, file a brief project summary with the permitting authority prior to beginning actual construction on the project. If the permitting authority determines that the project will have more than a de (~~minimum~~) minimis impact on air quality, the permitting authority may require the filing of a notice of construction application. The permitting authority may require the owner or operator to demonstrate that the emissions increase from the new or modified emission (~~s~~) unit is smaller than all of the levels listed below.

(c) The owner/operator may begin actual construction on the project thirty-one days after the permitting authority receives the summary, unless the permitting authority notifies the owner/operator within thirty days that the proposed new source requires a notice of construction application.

(d) Exemption level table:

LEVEL (TON POLLUTANT PER YEAR)

(a) Total Suspended Particulates 1.25

(b) PM-10 0.75

(c) PM-2.5 0.5

(d) Sulfur Oxides 2.0 (~~(d)~~) (e) Nitrogen Oxides

2.0 (~~(e)~~) (f) Volatile Organic Compounds, 2.0

total (~~(f)~~) (g) Carbon Monoxide 5.0

LEVEL (TONSPOLLUTANT PER YEAR)

~~((g))~~ (h) Lead 0.005 ~~((h))~~ (i) Ozone Depleting
Substances 1.0 (in effect on July 1, 2000), total ~~((i))~~ (j)
Toxic Air Pollutants ~~((As specified in~~

~~chapter 173-460
WAC-))~~ The de
minimis emission
rate specified for
each TAP in WAC
173-460-150.

(6) Application processing - completeness determination.

(a) Within thirty days after receiving a notice of construction application, the permitting authority ~~((shall))~~ must either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application.

(b) For a project subject to the Special protection requirements for federal Class I areas in WAC 173-400-117(2), a completeness determination includes a determination that the application includes all information required for review of that project under WAC 173-400-117(3).

(7) Final determination.

(a) Within sixty days of receipt of a complete notice of construction application, the permitting authority ~~((shall))~~ must either issue a final decision on the application or for those projects subject to public notice under WAC 173-400-171(1), initiate notice and comment on a proposed decision, followed as promptly as possible by a final decision.

(b) A person seeking approval to construct or modify a source that requires an operating permit may elect to integrate review of the operating permit application or amendment required under chapter 173-401 WAC and the notice of construction application required by this section. A notice of construction application designated for integrated review ~~((shall))~~ must be processed in accordance with operating permit program procedures and deadlines in chapter 173-401 WAC and must also comply with WAC 173-400-171.

(c) Every final determination on a notice of construction application ~~((shall))~~ must be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority.

(d) If the new source is a major stationary source or the change is a major modification subject to the requirements of WAC 173-400-112, the permitting authority ~~((shall))~~ must:

(i) Submit any control technology determination included in a final order of approval for a major source or a major modification to a major stationary source in a nonattainment area to the RACT/BACT/LAER clearinghouse maintained by EPA; and

(ii) Send a copy of the final approval order to EPA.

(8) Appeals. Any conditions contained in an order of

approval, or the denial of a notice of construction application may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. The permitting authority (~~shall~~) must promptly mail copies of each order approving or denying a notice of construction application to the applicant and to any other party who submitted timely comments on the application, along with a notice advising parties of their rights of appeal to the pollution control hearings board.

(9) Construction time limitations. Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing that an extension is justified. The extension of a project that is either a major stationary source in a nonattainment area or a major modification in a nonattainment area must also require LAER as it exists at the time of the extension. This provision does not apply to the time period between construction of the approved phases of a phased construction project. Each phase must commence construction within eighteen months of the projected and approved commencement construction date.

(10) Change of conditions.

(a) The owner or operator may request, at any time, a change in conditions of an approval order and the permitting authority may approve the request provided the permitting authority finds that:

(i) The change in conditions will not cause the source to exceed an emissions standard;

(ii) No ambient air quality standard will be exceeded as a result of the change;

(iii) The change will not adversely impact the ability of ecology or the authority to determine compliance with an emissions standard;

(iv) The revised order will continue to require BACT, as defined at the time of the original approval, for each new source approved by the order except where the Federal Clean Air Act requires LAER; and

(v) The revised order meets the requirements of WAC 173-400-110, 173-400-112, 173-400-113 (~~and~~), 173-400-720 and 173-460040(3), as applicable.

(b) Actions taken under this subsection are subject to the public involvement provisions of WAC 173-400-171 or the permitting authority's public notice and comment procedures.

(c) This rule does not prescribe the exact form such requests must take. However, if the request is filed as a notice of construction application, that application must be acted upon using the timelines found in subsections (6) and (7) of this section. The fee schedule found in WAC (~~173-400-116 shall also apply~~) 173455-120 applies to requests filed with ecology as notice of construction applications.

(11) Enforcement. All persons who receive an order of

approval must comply with all approval conditions contained in the order of approval.

AMENDATORY SECTION (Amending Order 90-62, filed 6/18/91, effective 9/18/91)

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 or modified 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.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

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.~~) Terms specific to this chapter are defined as follows:

- (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 screening 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)) ambient air. The ASIL for each toxic air pollutant is listed in WAC 173-460-150.~~

~~(3) "Best available control technology for toxics ((T-BACT))tBACT)" ((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)) means best available control technology, as that term is defined in WAC 173-400-030, as applied to toxic air pollutants.~~

~~(4) "De minimis emissions" means trivial levels of emissions that do not pose a threat to human health or the environment. The de minimis emission threshold values are listed in WAC 173-460-150.~~

~~(5) "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)) carcinogenic 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)) (6) "New or modified toxic air pollutant source" means ((:~~

~~)) 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)) (7) "Small quantity emission rate (SQER)" means a level of emissions below which dispersion modeling is not required to demonstrate compliance with acceptable source impact levels. SQERs are listed in WAC 173-460-150.~~

~~(8) "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)).

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

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

(a)) The provisions of this chapter ((shall)) apply statewide. ((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.)~~ WAC 173-460-090 and 173-460-100 must be implemented solely by ecology.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-040 New source review. (1) Applicability and exemptions. This chapter supplements the new source review requirements of WAC 173-400-110 by adding ~~((additional new source))~~ review requirements for new and modified 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) An action that is exempt from new source review under WAC 173-400-110 (4) or (5) is exempt under this chapter as well, except that a local air authority may adopt its own list of exemptions in accordance with RCW 70.94.331 (2)(b) to operate in lieu of or in addition to the exemptions in WAC 173-400-110 (4) and (5). An action that requires a notice of construction application under WAC 173-400-110 is subject to the review requirements of this chapter, unless the emissions before control equipment of each toxic air pollutant from a new source or the increase in emissions from each modification is less than the applicable de minimis emission threshold for that TAP listed in WAC 173-460-150.~~

(2) New source review of a modification is limited to the emission unit or units proposed to be modified and the TAPs whose emissions would increase as a result of the modification.

(3) The permitting authority that is reviewing a notice of construction application for a new or modified toxic air pollutant source must ensure that:

(a) The new or modified emission units use ~~((T-BACT))~~ tBACT for emissions control for the toxic air pollutants ~~((which are likely to increase))~~ with emission increases that trigger the need to submit a notice of construction application; and

~~((c) Sources required to use T-BACT for emission control demonstrate compliance))~~ (b) The new or modified emission units comply with WAC 173-460-070 as demonstrated 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.)~~

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

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

~~((a) When applying for a notice of construction, an owner or operator of)) A notice of construction application for a new or modified toxic air ((pollution)) pollutant source ((shall)) must 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)) the increase in the emissions of each TAP, after application of tBACT, emitted by the new or modified emission units.~~

(2) Small quantity ((sources)) emission rates. ~~((Sources that choose to use small quantity emission rate~~

~~tables instead of using~~) A notice of construction application that relies on SQERs rather than dispersion modeling ~~((shall))~~ to demonstrate compliance with WAC 173-460-070 must quantify the increase in emissions ~~((as required under WAC 173-460-080, in))~~ of each TAP emitted by the new or modified emission units after application of tBACT. The quantification must contain sufficient detail to demonstrate to the satisfaction of the permitting authority that the increase in emissions ~~((are))~~ is less than the applicable small quantity emission rates listed in WAC ~~((173-460-080))~~ 173-460-150.

(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))~~ may 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, indeno(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.)~~

AMENDATORY SECTION (Amending Order 98-04, filed 7/21/98, effective 8/21/98)

WAC 173-460-060 Control technology requirements. (1) Except as provided for in WAC 173-460-040, a person shall not establish, operate, or cause to be established or operated any new or modified toxic air pollutant source which is likely to increase TAP emissions without installing and operating ~~((T-BACT))~~ tBACT. ~~((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.~~

~~(e) 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.)~~

(2) A notice of construction application for a new or modified toxic air pollutant source must demonstrate that the new or modified emission units will employ tBACT for all TAPs for which the increase in emissions will exceed de minimis emission values as found in WAC 173-460-150. TAP emission increases from nonprocess fugitive emissions activities such as construction or demolition sites, unpaved and paved roads, coal piles, waste piles and fuel and ash handling operations are exempt from the requirement to apply tBACT.

AMENDATORY SECTION (Amending Order 90-62, 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))~~ application must demonstrate that the increase in emissions of toxic air pollutants from the new or modified emission units at the source are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Compliance ~~((shall))~~ must be demonstrated in any area to which the applicant does not ~~((have restricted))~~ restrict or ~~((controlled public))~~ control access. The ~~((source shall))~~ application must demonstrate compliance by using procedures established in this chapter after complying with the control technology requirements in WAC 173-460-060.

NEW SECTION

WAC 173-460-071 Voluntary limits on emissions. (1) If requested by an applicant, the permitting authority may issue a regulatory order that limits emissions of a particular TAP to a level that is lower than the potential emissions of that particular TAP otherwise allowed under all applicable requirements of chapter

70.94 RCW and the federal Clean Air Act.

(2) Any order issued under this section is subject to the notice and comment procedures in WAC 173-400-171 or the permitting authority's public notice and commenting procedures.

(3) Any order issued under this section must include monitoring, recordkeeping, and reporting requirements sufficient to ensure that the applicant complies with any conditions established under this section. Monitoring requirements must use terms, test methods, units, averaging periods, and other statistical conventions consistent with the requirements of WAC 173-400-105.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-080 ~~((Demonstrating ambient impact compliance.))~~ First tier review. (1) ~~((When applying for))~~ A notice of construction ~~((under WAC 173-460-040, the owner or operator of))~~ application for a new or modified toxic air pollutant source ~~((which is likely to increase TAP emissions shall complete))~~ must include an acceptable source impact level analysis for ~~((Class A~~

~~and Class B)) each TAP(s) emitted by the new or modified emission units with an emission increase greater than the de minimis emission level specified in WAC 173-460-150. The permitting 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
 TAP Emissions
 Level (Annual ug/m3) Pounds per Year (10 meter stack
 and downwash)

0.001 to 0.0099 0.01 to 0.060.07 to 0.120.13 to
 0.991.0 to 10

0.5 10 20 50 500

CLASS B TOXIC AIR POLLUTANTS SMALL QUANTITY EMISSION
 RATES
 Acceptable Source Impact TAP Emissions Level (24 hour ug/m3)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 173460-160; or, if applicable, the source TAP emission rates do not exceed the rates specified in subsection (2)(e) of this section.)~~ The acceptable source impact analysis requirement of WAC 173-460070 can be satisfied for any TAP using either dispersion modeling or the small quantity emission rate.

(a) Dispersion modeling. The applicant who relies on dispersion modeling must model the increase in the emissions of each TAP emitted by the new or modified emission units, after application of tBACT. The notice of construction application must demonstrate that the modeled ambient impact of the aggregate emissions increase of each TAP does not exceed the ASIL for that

TAP as listed in WAC 173-460-150. If concentrations predicted by dispersion screening models exceed applicable acceptable source impact levels, more refined modeling and/or emission techniques must be used. Refined modeling techniques must be approved by the permitting authority.

(b) Small quantity emission rates. An applicant may show for any TAP that the increase in emissions of that TAP, after application of tBACT, is less than the small quantity emission rate listed for that TAP in WAC 173-460-150.

(3) Reduction of TAPs from existing emission units. An applicant may include in a acceptable source impact analysis proposed reductions in actual emissions of a particular TAP from emission units at the source that are not new or modified for the

purpose of offsetting emissions of that TAP caused by the new or modified source. The reductions in TAP emissions authorized by this subsection must be included in the approval order as enforceable emission limits and must meet all the requirements of

WAC 173-460-071.

(4) Decision criteria.

(a) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units does not exceed the ASIL for that TAP then the authority may approve the notice of construction application.

(b) If the permitting authority finds that the modeled impact of the increase in emissions of a TAP from the new or modified emission units exceeds the ASIL for that TAP then the permitting authority may not approve the project. The applicant may file a second tier review application in compliance with WAC 173-460-090.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

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

~~((a) The owner or operator)) An applicant 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 that ecology perform a second tier ((analysis evaluation)) review 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)) review must be submitted to ecology with a copy to the ((local)) permitting 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)) with jurisdiction.~~

(2) Second tier petition submittal requirements. Ecology((shall)) will evaluate a ((source's)) second tier ((analysis)) petition only if:

~~((+)) (a) The permitting authority ((has advised ecology that other conditions for processing the notice of construction have been met)) submits to ecology a preliminary order of approval that addresses all applicable new source review issues with the exception of the outcome of the second tier review, State Environmental Policy Act review, public notification, and~~

prevention of significant deterioration review; and
~~((ii))~~ (b) The emission controls contained in the ~~((conditional notice of construction))~~ preliminary order of approval represent at least ~~((T-BACT))~~ tBACT; and

~~((iii))~~ (c) The applicant has developed a health impact assessment protocol that has been approved by ecology;

(d) The ambient ~~((concentrations))~~ impact of the emissions increase of each TAP that exceeds acceptable source impact levels ~~((after))~~ has been quantified using ~~((more))~~ refined ~~((emission quantification and))~~ air dispersion modeling techniques as approved in the health impact assessment protocol; and

(e) The petition contains a health impact assessment conducted in accordance with the approved health impact assessment protocol.

Note : Contact ecology's air quality program for a copy of a guidance document to assist in the preparation of the health impact assessment protocol

~~((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 assessments 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)) (3) Health impact assessment (HIA) protocol. The HIA presents data about the new or modified source and its built and natural environment. A HIA includes but is not limited to: Site description, TAP concentrations and toxicity, identification of exposed populations and an exposure assessment. The HIA protocol must be reviewed and approved by ecology prior to development of the HIA.~~

~~(4) The health impact assessment ((shall)) must utilize current scientific information. New scientific information on the toxicological characteristics of toxic air pollutants may be used by ecology 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.) risk-based concentrations.~~

(5) Background concentrations of TAPs will be considered as part of a second tier review. Background concentrations can be estimated using:

(a) The latest National Ambient Toxics Assessment data for the appropriate census tracts; or

(b) Ambient monitoring data for the project's location; or

(c) Modeling of emissions of the TAPs subject to second tier review from all stationary sources within 1.5 kilometers of the source location.

(6) Reduction of TAPs from existing emission units. For the purpose of offsetting emissions of a particular TAP, an applicant may propose reductions in actual emissions of that TAP from existing, unmodified emission units at the source or existing, unmodified emission units at other nearby sources. The health impact analysis must evaluate the benefits of the emission reductions. The reductions in TAP emissions authorized by this subsection must be included in an approval order as enforceable emission limits and must meet all requirements of WAC 173-460-071.

(7) Approval criteria for second tier review. Ecology may recommend approval of a project that is likely to cause an exceedance of acceptable source impact levels for one or more TAPs only if it determines that the emission controls for the new and modified emission units represent tBACT and the applicant demonstrates that the increase in emissions of TAPs is not likely to result in an increased cancer risk of more than one in one hundred thousand and ecology determines that the noncancer hazard is found to be acceptable.

(8) Application processing. Within thirty days after receiving a second tier petition ecology must either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information required to make it complete.

(9) Public involvement. All notice of construction approval orders with a second tier component are subject to the public notice and comment requirements of WAC 173-400-171, which may be integrated with the permitting authority's public notice and comment procedures.

(10) Recommendation. Within sixty days of determining that a petition is complete ecology must make a recommendation to the permitting authority.

(a) If ecology recommends approval of the second tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the second tier petition, then the permitting authority may not approve the project.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-100 (~~Request for risk management decision.~~) Third tier review. (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.~~) An applicant for a project that exceeds the second tier review thresholds may submit a third tier petition requesting that the director of ecology (~~establish allowable emissions for the source~~) approve the project based on a risk management analysis.

(2) Contents of the (~~application~~) petition.

The (~~applicant shall~~) petition must meet the submittal requirements of WAC 173-460-090(~~(4) 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~~) petition. Prior denial of (~~the~~) a second tier (~~analysis application~~) petition submitted 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~~) Ecology's director must find that the following conditions are met before approving a third tier petition:

(a) Proposed emission controls represent (~~all known available and reasonable technology~~) at least tBACT; 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~~) A HIA has been completed as described in WAC 173-460-090(3); and

(c) (~~The proposed changes~~) Approval of the project will result in a greater environmental benefit to the (~~environment as a whole~~) state of Washington.

(4) Additional methods to reduce toxic air pollutants. In addition to the requirements in subsection (3) of this section, the (~~owner or operator~~) applicant 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) Application processing. Within thirty days of receiving a third tier petition ecology must determine if the petition includes the information required in WAC 173-460-090. If the petition is deemed complete, ecology must begin substantive review. If the petition is deemed incomplete, ecology must give written notification to the applicant of the information that is required to make the petition complete.

(6) Public involvement. Ecology will initiate public notice and comment within ~~((thirty))~~ sixty days of ~~((receipt of a completed risk management decision application))~~ determining that a third tier petition is complete. In addition to the public notice and comment requirements of WAC 173-400-171, the ~~((owner or operator shall))~~ applicant must hold a public hearing to:

(a) Present the results of the ~~((second tier))~~ health impact 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.))~~

(7) Recommendation.

(a) If ecology recommends approval of the third tier petition, the permitting authority may approve the notice of construction application. Any new emission limits or conditions specified by ecology must be incorporated into the approval order.

(b) If ecology recommends denial of the third tier petition then the permitting authority may not approve the project.

AMENDATORY SECTION (Amending Order 93-19, filed 1/14/94, effective 2/14/94)

WAC 173-460-150 ~~((Class A toxic air pollutants: Known, probable and potential human carcinogens and acceptable source impact levels.))~~ Table of ASIL, SQER and de minimis emission values.

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

CAS # SUBSTANCE

~~75-07-0 Acetaldehyde 53-96-3 2-
Acetylamino fluorene 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~~

CAS # — SUBSTANCE

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)

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'-Dimethylbenzidine

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 (nitrofurans group)

765-34-4 Glyciadialdehyde

76-44-8 Heptachlor

CAS # SUBSTANCE

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-Methylehrysene 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-Naphthylamine 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-naphthylamine

— 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 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 2,2,4,6-Trichlorophenol 75-01-4 Vinyl chloride

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

ANNUAL CAS #	SUBSTANCE	AVERAGE
10-6 RISK ASIL MICRO GRAMS/M ₃		
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
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

10-6 RISK ASIL
MICROGRAMS/M³
ANNUAL
AVERAGE

CAS #	SUBSTANCE	
95-80-7	2,4-Toluene diamine o-Toluidine	0.0110000
95-53-4	o-Toluidine hydrochloride	0.1400000
636-21-	Toxaphene Trichloroethylene	0.1400000
5 8001-	2,4,6-Trichlorophenol Vinyl	0.0031000
35-2 79-	chloride	0.5900000
01-6 88-		0.3200000
06-2 75-		0.0120000
01-4		

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

CAS # SUBSTANCE ASIL MICRO- AVERAGIN
GRAMS/M³ G TIME
Primary aluminum-0.0013 Annual smelter uncontrolled
roof vent polyaromatic hydrocarbon (PAH) emissions (Note: Quantify
according to WAC 173.460.050 (4)(d))

64-82-5 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-0.7 24 hour (2-Chloroaniline) (MBOCA)

101-77-9 4,4 Methylene dianiline-2.7 24 hour
— Polyaromatic-0.00048 Annual hydrocarbon (PAH)
emissions (Note: Quantify according to WAC 173.460.050 (4)(d))

584-84-9 2,4 Toluene diisocyanate-0.12 24 hour)

The following table lists the common name of toxic air pollutants, the chemical abstract service (CAS) number; the averaging period; the acceptable source impact level (ASIL); the small quantity emission rate (SQER); and de minimis emission values.

Common Name	CAS #	Averaging Period	ASIL (µg/m ³)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,1,2-Tetrachloroethane	630-20-6	year	0.135	25.9	1.3
1,1,1,2-Tetrafluoroethane	811-97-2	24-hr	8.00E+04	10500	526
1,1,1-Trichloroethane	71-55-6	24-hr	1000	131	6.57
1,1,2,2-Tetrachloroethane	79-34-5	year	0.0172	3.3	0.165

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,2-Trichloroethane	79-00-5	year	0.0625	12	0.6
1,1-Dichloroethane	75-34-3	year	0.625	120	6
1,1-Dichloroethylene	75-35-4	24-hr	200	26.3	1.31
1,1-Difluoroethane	75-37-6	24-hr	4.00E+04	5260	263
1,1-Dimethylhydrazine	57-14-7	24-hr	0.5	0.0657	0.00329
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-Dioxin	3268-87-9	year	0.000263	0.0505	0.00252
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8 Hexachlorodibenzo-p-dioxin	57653-85-7	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	year	2.63E-07	5.05E-05	2.52E-06
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	year	5.26E-07	0.000101	5.05E-06
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	year	2.63E-08	5.05E-06	2.52E-07
1,2,3-Trichloropropane	96-18-4	24-hr	1.84	0.242	0.0121
1,2-Dibromo-3-chloropropane	96-12-8	year	0.000526	0.101	0.00505
1,2-Dibromoethane	106-93-4	year	0.0141	2.71	0.135
1,2-Dichloroethane	107-06-2	year	0.0385	7.39	0.369
1,2-Dichloropropane	78-87-5	year	0.1	19.2	0.959
1,2-Dimethylhydrazine	540-73-8	year	6.25E-06	0.0012	6.00E-05
1,2-Diphenylhydrazine	122-66-7	year	0.004	0.768	0.0384
1,2-Epoxybutane	106-88-7	24-hr	20	2.63	0.131
1,3-Butadiene	106-99-0	year	0.00588	1.13	0.0564
1,3-Dichloropropene	542-75-6	year	0.0625	12	0.6
1,3-Propane Sultone	1120-71-4	year	0.00145	0.278	0.0139
1,4-Dichlorobenzene	106-46-7	year	0.0909	17.4	0.872
1,4-Dioxane	123-91-1	year	0.13	24.9	1.25
1,6-Dinitropyrene	42397-64-8	year	9.09E-05	0.0174	0.000872
1,6-Hexamethylene diisocyanate	822-06-0	24-hr	0.07	0.00920	0.000460
1,8-Dinitropyrene	42397-65-9	year	0.000909	0.174	0.00872
1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone	555-84-0	year	0.00196	0.376	0.0188
1-Amino-2-methylanthraquinone	82-28-0	year	0.0233	4.47	0.224
1-Chloro-1,1-difluoroethane	75-68-3	24-hr	5.00E+04	6570	329
1-Nitropyrene	5522-43-0	year	0.00909	1.74	0.0872
2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	year	5.26E-05	0.0101	0.000505
2,3,3',4,4',5'-Hexachlorobiphenyl	38380-08-4	year	5.26E-05	0.0101	0.000505
2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	year	0.000263	0.0505	0.00252
2,3,3',4,4',5',5'-Heptachlorobiphenyl	39635-31-9	year	0.000263	0.0505	0.00252
2',3,4,4',5-Pentachlorobiphenyl	65510-44-3	year	0.000263	0.0505	0.00252
2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	year	0.000263	0.0505	0.00252
2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	year	5.26E-05	0.0101	0.000505
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	year	2.63E-07	5.05E-05	2.52E-06
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	year	5.26E-08	1.01E-05	5.05E-07
2,3,7,8-Tetrachlorodibenzo-p-dioxin & Related Compounds, NOS	--	year	2.63E-08	5.05E-06	2.52E-07
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	year	2.63E-07	5.05E-05	2.52E-06
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	year	2.63E-08	5.05E-06	2.52E-07
2,3',4,4',5,5'-Hexachlorobiphenyl	52663-72-6	year	0.000263	0.0505	0.00252

Common Name	CAS #	Averaging Period	ASIL ($\mu\text{g}/\text{m}^3$)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
2,4,6-Trichlorophenol	88-06-2	year	0.05	9.59	0.48
2,4-Diaminoanisole	615-05-4	year	0.152	29.2	1.46
2,4-Diaminoanisole Sulfate	39156-41-7	year	0.27	51.8	2.59
2,4-Diaminotoluene	95-80-7	year	0.000909	0.174	0.00872
2,4-Dinitrotoluene	121-14-2	year	0.0112	2.15	0.107
2-Acetylaminofluorene	53-96-3	year	0.000769	0.148	0.00738
2-Amino-3-methyl-9H pyrido[2,3-b]indole	68006-83-7	year	0.00294	0.564	0.0282
2-Amino-3-methylimidazo-[4,5-f]quinoline	76180-96-6	year	0.0025	0.48	0.024
2-Amino-5-(5-Nitro-2-Furyl)-1,3, 4-Thiadiazol	712-68-5	year	0.000217	0.0416	0.00208
2-Aminoanthraquinone	117-79-3	year	0.106	20.3	1.02
2-Chloroacetophenone	532-27-4	24-hr	0.03	0.00394	0.000197
2-Ethoxyethanol	110-80-5	24-hr	70	9.20	0.460
2-Methoxyethanol	109-86-4	24-hr	60	7.89	0.394
2-Methyl-1-nitroanthraquinone	129-15-7	year	0.000833	0.16	0.00799
2-Methylphenol	95-48-7	24-hr	600	78.9	3.94
2-Naphthylamine	91-59-8	year	0.00196	0.376	0.0188
2-Nitrofluorene	607-57-8	year	0.0909	17.4	0.872
2-Nitropropane	79-46-9	24-hr	20	2.63	0.131
3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	year	0.000263	0.0505	0.00252
3,3',4,4',5-Pentachlorobiphenyl	57465-28-8	year	2.63E-07	5.05E-05	2.52E-06
3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	year	0.000263	0.0505	0.00252
3,3'-Dichlorobenzidine	91-94-1	year	0.00294	0.564	0.0282
3,4,4',5-Tetrachlorobiphenyl	70362-50-4	year	0.000263	0.0505	0.00252
3-Amino-9-ethylcarbazole hydrochloride	6109-97-3	year	0.0455	8.73	0.437
3-Chloro-2-methyl-propene	563-47-3	year	0.025	4.8	0.24
3-Methylcholanthrene	56-49-5	year	0.000159	0.0305	0.00153
3-Methylphenol	108-39-4	24-hr	600	78.9	3.94
4,4'-Diaminodiphenyl Ether	101-80-4	year	0.025	4.8	0.24
4,4-Methylene bis(2-chloroaniline)	101-14-4	year	0.00233	0.447	0.0224
4,4-Methylene bis(2-Methylaniline)	838-88-0	year	0.00385	0.739	0.0369
4,4'-Methylene bis(n,n'-dimethyl)aniline	101-61-1	year	0.0769	14.8	0.738
4,4'-Methylenedianiline	101-77-9	year	0.00217	0.416	0.0208
4,4-Methylenedianiline Dihydrochloride	13552-44-8	year	0.00294	0.564	0.0282
4,4-Thiodianiline	139-65-1	year	0.000233	0.0447	0.00224
4-Aminobiphenyl	92-67-1	year	0.000167	0.032	0.0016
4-Chloro-o-phenylenediamine	95-83-0	year	0.217	41.6	2.08
4-Dimethylaminoazobenzene	60-11-7	year	7.69E+04	1.48E+07	7.38E+05
4-Methylphenol	106-44-5	24-hr	600	78.9	3.94
4-Nitropyrene	57835-92-4	year	0.00909	1.74	0.0872
5-Methylchrysene	3697-24-3	year	0.000909	0.174	0.00872
5-Nitroacenaphthene	602-87-9	year	0.027	5.18	0.259
5-Nitro-o-Anisidine	99-59-2	year	0.0714	13.7	0.685
6-Nitrochrysene	7496-02-8	year	9.09E-05	0.0174	0.000872
7,12-Dimethylbenz[a]anthracene	57-97-6	year	1.41E-05	0.00271	0.000135
7h-Dibenzo[c,g]carbazole	194-59-2	year	0.000909	0.174	0.00872
A-alpha-c(2-amino-9h-pyrido[2,3-b]indole)	26148-68-5	year	0.00877	1.68	0.0841
Acetaldehyde	75-07-0	year	0.37	71	3.55
Acetamide	60-35-5	year	0.05	9.59	0.48
Acetonitrile	75-05-8	year	60	1.15E+04	576
Acrolein	107-02-8	24-hr	0.06	0.00789	0.000394
Acrylamide	79-06-1	year	0.000769	0.148	0.00738
Acrylic Acid	79-10-7	24-hr	1	0.131	0.00657

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Acrylonitrile	107-13-1	year	0.00345	0.662	0.0331
Actinomycin D	50-76-0	year	4.00E-07	7.68E-05	3.84E-06
Alar	1596-84-5	year	0.196	37.6	1.88
Aldrin	309-00-2	year	0.000204	0.0391	0.00196
Allyl Chloride	107-05-1	year	0.167	32	1.6
alpha-Hexachlorocyclohexane	319-84-6	year	0.0013	0.249	0.0125
Amitrole	61-82-5	year	0.0037	0.71	0.0355
Ammonia	7664-41-7	24-hr	70.8	9.31	0.465
Ammonium bisulfate	7803-63-6	1-hr	120	0.263	0.0131
Ammonium sulfate	7783-20-2	1-hr	120	0.263	0.0131
Aniline	62-53-3	year	0.625	120	6
Antimony Trioxide	1309-64-4	24-hr	0.2	0.0263	0.00131
Aramite	140-57-8	year	0.116	22.3	1.11
Arsenic & Inorganic Arsenic Compounds	--	year	0.000303	0.0581	0.00291
Arsine	7784-42-1	24-hr	0.05	0.00657	0.000329
Asbestos	1332-21-4	year	1.59E-05	0.00305	0.000153
Auramine	492-80-8	year	0.004	0.768	0.0384
Azaserine	115-02-6	year	0.000323	0.062	0.0031
Azathioprine	446-86-6	year	0.00196	0.376	0.0188
Azobenzene	103-33-3	year	0.0323	6.2	0.31
Barium Chromate	10294-40-3	year	1.49E-05	0.00286	0.000143
Benz[a]anthracene	56-55-3	year	0.00909	1.74	0.0872
Benzene	71-43-2	year	0.0345	6.62	0.331
Benzidine	92-87-5	year	7.14E-06	0.00137	6.85E-05
Benzo[a]pyrene	50-32-8	year	0.000909	0.174	0.00872
Benzo[b]fluoranthene	205-99-2	year	0.00909	1.74	0.0872
Benzo[j]fluoranthene	205-82-3	year	0.00909	1.74	0.0872
Benzo[k]fluoranthene	207-08-9	year	0.00909	1.74	0.0872
Benzyl Chloride	100-44-7	year	0.0204	3.91	0.196
Benzyl Violet 4B	1694-09-3	year	0.175	33.6	1.68
Beryllium & Compounds (NOS)	--	year	0.000417	0.08	0.004
Beryllium Oxide	1304-56-9	year	0.000417	0.08	0.004
Beryllium Sulfate	13510-49-1	year	1.16E-06	0.000223	1.11E-05
beta-Butyrolactone	3068-88-0	year	0.00345	0.662	0.0331
Beta-hexachlorocyclohexane	319-85-7	year	0.00233	0.447	0.0224
beta-Propiolactone	57-57-8	year	0.00025	0.048	0.0024
Bis(chloroethyl)ether	111-44-4	year	0.00141	0.271	0.0135
Bis(chloromethyl)ether	542-88-1	year	7.69E-05	0.0148	0.000738
Bromodichloromethane	75-27-4	year	0.027	5.18	0.259
Bromoform	75-25-2	year	0.909	174	8.72
Butylated hydroxyanisole	25013-16-5	year	17.5	3360	168
C.I. Basic Red 9 Monohydrochloride	569-61-9	year	0.0141	2.71	0.135
Cadmium & Compounds	7440-43-9	year	0.000238	0.0457	0.00228
Captafol	2425-06-1	year	0.0233	4.47	0.224
Captan	133-06-2	year	1.52	292	14.6
Carbon disulfide	75-15-0	24-hr	800	105	5.26
Carbon monoxide	630-08-0	1-hr	23000	50.4	1.14
Carbon Tetrachloride	56-23-5	year	0.0238	4.57	0.228
Chlorambucil	305-03-3	year	7.69E-06	0.00148	7.38E-05
Chlordane	57-74-9	year	0.00294	0.564	0.0282
Chlordecone	143-50-0	year	0.000217	0.0416	0.00208
Chlorendic Acid	115-28-6	year	0.0385	7.39	0.369

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Chlorinated Paraffins	108171-26-2	year	0.04	7.68	0.384
Chlorine	7782-50-5	24-hr	0.2	0.026	0.00131
Chlorine dioxide	10049-04-4	24-hr	0.2	0.026	0.00131
Chlorobenzene	108-90-7	24-hr	1000	131	6.57
Chlorobenzilate	510-15-6	year	0.0323	6.2	0.31
Chlorodifluoromethane	75-45-6	24-hr	5.00E+04	6570	328
Chloroform	67-66-3	year	0.0435	8.35	0.417
Chloromethyl methyl ether	107-30-2	year	0.00145	0.278	0.0139
Chloropicrin	76-06-2	24-hr	0.4	0.053	0.00263
Chlorothalonil	1897-45-6	year	1.12	215	10.7
Chlorozotocin	54749-90-5	year	1.45E-05	0.00278	0.000139
Chromic Acid	11115-74-5	year	1.51E-05	0.0029	0.000145
Chromic Trioxide	1333-82-0	year	1.28E-05	0.00246	0.000123
Chromic(VI) Acid	7738-94-5	year	1.51E-05	0.0029	0.000145
Chromium Hexavalent: Soluble, except Chromic Trioxide	--	year	6.67E-06	0.00128	6.40E-05
Chromium(VI)	18540-29-9	year	6.67E-06	0.00128	6.40E-05
Chrysene	218-01-9	year	0.0909	17.4	0.872
Cinnamyl Anthranilate	87-29-6	year	0.769	148	7.38
Cobalt	7440-48-4	24-hr	0.1	0.013	0.000657
Coke Oven Emissions	8007-45-2	year	0.00162	0.311	0.0155
Copper & Compounds	--	1-hr	100	0.219	0.011
Cumene	98-82-8	24-hr	400	52.6	2.63
Cupferron	135-20-6	year	0.0159	3.05	0.153
Cyclohexane	110-82-7	24-hr	6000	789	39.4
Cyclophosphamide (anhydrous)	50-18-0	year	0.00588	1.13	0.0564
Cyclophosphamide (Hydrated)	6055-19-2	year	0.00625	1.2	0.06
D & C Red No. 9	5160-02-1	year	0.667	128	6.4
Dacarbazine	4342-03-4	year	7.14E-05	0.0137	0.000685
Dantron	117-10-2	year	0.0455	8.73	0.437
DDD	72-54-8	year	0.0145	2.78	0.139
DDE	72-55-9	year	0.0103	1.98	0.0988
DDT	50-29-3	year	0.0103	1.98	0.0988
Di(2-ethylhexyl)phthalate	117-81-7	year	0.0417	8	0.4
Diazinon	333-41-5	24-hr	9	1.18	0.0591
Dibenz[a,h]acridine	226-36-8	year	0.00909	1.74	0.0872
Dibenz[a,h]anthracene	53-70-3	year	0.000833	0.16	0.00799
Dibenz[a,j]acridine	224-42-0	year	0.00909	1.74	0.0872
Dibenzo[a,e]pyrene	192-65-4	year	0.000909	0.174	0.00872
Dibenzo[a,h]pyrene	189-64-0	year	9.09E-05	0.0174	0.000872
Dibenzo[a,i]pyrene	189-55-9	year	9.09E-05	0.0174	0.000872
Dibenzo[a,l]pyrene	191-30-0	year	9.09E-05	0.0174	0.000872
Dibromochloromethane	124-48-1	year	0.037	7.1	0.355
Dichloromethane	75-09-2	year	1	192	9.59
Dichlorvos	62-73-7	year	0.012	2.3	0.115
Dieldrin	60-57-1	year	0.000217	0.0416	0.00208
Diesel Engine Exhaust, Particulate	--	year	0.00333	0.639	0.032
Diethanolamine	111-42-2	24-hr	3	0.394	0.0197
Diethyl mercury	627-44-1	24-hr	1.00E-99	1.00E-99	1.00E-99
Diethylstilbestrol	56-53-1	year	1.00E-05	0.00192	9.59E-05
Diglycidyl Resorcinol Ether	101-90-6	year	0.00204	0.391	0.0196
Dihydrosafrole	94-58-6	year	0.0769	14.8	0.738
Dimethyl Mercury	593-74-8	24-hr	1.00E-99	1.00E-99	1.00E-99

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Dimethylcarbamoyl Chloride	79-44-7	year	0.00027	0.0518	0.00259
Dimethylvinylchloride	513-37-1	year	7.69	1480	73.8
Direct Black 38	1937-37-7	year	4.76E+04	9.13E+06	4.57E+05
Direct Blue 6	2602-46-2	year	0.000476	0.0913	0.00457
Direct Brown 95	16071-86-6	year	0.000526	0.101	0.00505
Disperse Blue 1	2475-45-8	year	0.769	148	7.38
Disulfoton	298-04-4	24-hr	6	0.789	0.0394
Epichlorohydrin	106-89-8	year	0.0435	8.35	0.417
Estradiol 17b	50-28-2	year	9.09E-05	0.0174	0.000872
Ethyl Carbamate	51-79-6	year	0.00345	0.662	0.0331
Ethyl Chloride	75-00-3	24-hr	3.00E+04	3940	197
Ethylbenzene	100-41-4	year	0.4	76.8	3.84
Ethylene Glycol	107-21-1	24-hr	400	52.6	2.63
Ethylene glycol monobutyl ether	111-76-2	24-hr	1.30E+04	1710	85.4
Ethylene glycol monoethyl ether acetate	111-15-9	24-hr	300	39.4	1.97
Ethylene glycol monomethyl ether acetate	110-49-6	24-hr	90	11.8	0.590
Ethylene oxide	75-21-8	year	0.0114	2.19	0.109
Ethylene Thiourea	96-45-7	year	0.0769	14.8	0.738
Ethyleneimine	151-56-4	year	5.26E-05	0.0101	0.000505
Ferric Sulfate	10028-22-5	1-hr	120	0.263	0.0131
Fluoride containing chemicals, NOS	--	24-hr	13	1.71	0.0854
Fluorine gas F ₂	7782-41-4	24-hr	15.8	2.08	0.104
Formaldehyde	50-00-0	year	0.167	32	1.6
Furmecyclox	60568-05-0	year	0.116	22.3	1.11
Furylfuramide	3688-53-7	year	0.0145	2.78	0.139
gamma-Hexachlorocyclohexane	58-89-9	year	0.00323	0.62	0.031
Glu-P-1	67730-11-4	year	0.000714	0.137	0.00685
Glu-P-2	67730-10-3	year	0.0025	0.48	0.024
Glutaraldehyde	111-30-8	24-hr	0.08	0.0105	0.000526
Gyromitrin	16568-02-8	year	0.000345	0.0662	0.00331
HC Blue 1	2784-94-3	year	0.0667	12.8	0.64
Heptachlor	76-44-8	year	7.69E-05	0.0148	0.000738
Heptachlor epoxide	1024-57-3	year	0.000385	0.0739	0.00369
Heptachlorodibenzo-p-dioxins, NOS	37871-00-4	year	2.63E-06	0.000505	2.52E-05
Hexachlorobenzene	118-74-1	year	0.00196	0.376	0.0188
Hexachlorobutadiene	87-68-3	year	0.0455	8.73	0.437
Hexachlorocyclohexane	608-73-1	year	0.000909	0.174	0.00872
Hexachlorocyclopentadiene	77-47-4	24-hr	0.2	0.026	0.00131
Hexachlorodibenzo-p-Dioxins, NOS	34465-46-8	year	2.63E-07	5.05E-05	2.52E-06
Hexachloroethane	67-72-1	year	0.0909	17.4	0.872
Hydrazine	302-01-2	year	0.000204	0.0391	0.00196
Hydrazine Sulfate	10034-93-2	year	0.00116	0.223	0.0111
Hydrogen chloride	7647-01-0	24-hr	9	1.18	0.0591
Hydrogen Cyanide	74-90-8	24-hr	9	1.18	0.0591
Hydrogen Fluoride	7664-39-3	24-hr	14	1.84	0.0920
Hydrogen Selenide	7783-07-5	1-hr	5	0.011	0.000548
Hydrogen Sulfide	7783-06-4	24-hr	2	0.263	0.0131
Indeno[1,2,3-cd]pyrene	193-39-5	year	0.00909	1.74	0.0872
Isophorone	78-59-1	24-hr	2000	2.63	13.1
Isopropyl Alcohol	67-63-0	1-hr	3200	7.01	0.35
Lasiocarpine	303-34-4	year	0.000455	0.0873	0.00437
Lead and compounds (NOS)		year	0.0833	16	10

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Lead Acetate	301-04-2	year	0.0125	2.4	0.12
Lead Chromate	7758-97-6	year	4.14E-05	0.00794	0.000397
Lead Chromate Oxide	18454-12-1	year	7.01E-05	0.0135	0.000673
Lead Subacetate	1335-32-6	year	0.0909	17.4	0.872
Maleic Anhydride	108-31-6	24-hr	0.7	0.0920	0.00460
Manganese & Compounds	--	24-hr	0.04	0.00526	0.000263
Melphalan	148-82-3	year	2.70E-05	0.00518	0.000259
Melphalan HCl	3223-07-2	year	2.70E-05	0.00518	0.000259
Mercury, Elemental	7439-97-6	24-hr	0.09	0.0118	0.000591
Methyl Alcohol	67-56-1	24-hr	4000	526	26.3
Methyl Bromide	74-83-9	24-hr	5	0.657	0.0629
Methyl Chloride	74-87-3	24-hr	90	11.8	0.591
Methyl Ethyl Ketone	78-93-3	24-hr	5000	657	32.9
Methyl Isobutyl Ketone	108-10-1	24-hr	3000	394	19.7
Methyl Isocyanate	624-83-9	24-hr	1	0.131	0.00657
Methyl methacrylate	80-62-6	24-hr	700	92.0	4.60
Methyl Methanesulfonate	66-27-3	year	0.0357	6.85	0.343
Methyl Tertiary Butyl Ether	1634-04-4	year	3.85	739	36.9
Methylene diphenyl isocyanate	101-68-8	24-hr	0.7	0.0920	0.00460
Methylthiouracil	56-04-2	year	0.00909	1.74	0.0872
Michler's ketone	90-94-8	year	0.004	0.768	0.0384
Mirex	2385-85-5	year	0.000196	0.0376	0.00188
Mitomycin C	50-07-7	year	4.35E-07	8.35E-05	4.17E-06
Monocrotaline	315-22-0	year	0.000345	0.0662	0.00331
m-Xylene	108-38-3	24-hr	221	29.0	1.45
n,n-Dimethylformamide	68-12-2	24-hr	80	10.5	0.526
n-[4-(5-nitro-2-furyl)-2-thiazolyl]-acetamide	531-82-8	year	0.00233	0.447	0.0224
Naphthalene	91-20-3	year	0.0294	5.64	0.282
n-Hexane	110-54-3	24-hr	700	92.0	4.60
Nickel Refinery Dust	--	year	0.0042	0.806	0.0403
Nickel Subsulfide	12035-72-2	year	0.00204	0.391	0.0196
Nifurthiazole	3570-75-0	year	0.00152	0.292	0.0146
Nitric Acid	7697-37-2	1-hr	86	0.188	0.00942
Nitrilotriacetic acid	139-13-9	year	0.667	128	6.4
Nitrilotriacetic acid, trisodium salt monohydrate	18662-53-8	year	0.345	66.2	3.31
Nitrofen	1836-75-5	year	0.0435	8.35	0.417
Nitrofurazone	59-87-0	year	0.0027	0.518	0.0259
Nitrogen dioxide	10102-44-0	1-hr	470	1.03	0.457
n-Methyl-n-nitro-n-nitrosoguanidine	70-25-7	year	0.000417	0.08	0.004
n-Nitrosodiethanolamine	1116-54-7	year	0.00125	0.24	0.012
n-Nitrosodiethylamine	55-18-5	year	1.00E-04	0.0192	0.000959
n-Nitrosodimethylamine	62-75-9	year	0.000217	0.0416	0.00208
n-Nitroso-di-n-butylamine	924-16-3	year	0.000323	0.062	0.0031
n-Nitrosodi-n-propylamine	621-64-7	year	0.0005	0.0959	0.0048
n-Nitrosodiphenylamine	86-30-6	year	0.385	73.9	3.69
n-Nitrosomorpholine	59-89-2	year	0.000526	0.101	0.00505
n-Nitroso-n-ethylurea	759-73-9	year	0.00013	0.0249	0.00125
n-Nitroso-n-methylethylamine	10595-95-6	year	0.000159	0.0305	0.00153
n-Nitroso-n-methylurea	684-93-5	year	2.94E-05	0.00564	0.000282
n-Nitroso-n-Methylurethane	615-53-2	year	3.23E-05	0.0062	0.00031
n-Nitrososnicotine	16543-55-8	year	0.0025	0.48	0.024
n-Nitrosopiperidine	100-75-4	year	0.00037	0.071	0.00355

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n-Nitrosopyrrolidine	930-55-2	year	0.00167	0.32	0.016
o-Anisidine	90-04-0	year	0.025	4.8	0.24
o-Anisidine Hydrochloride	134-29-2	year	0.0323	6.2	0.31
o-Phenylphenate, Sodium	132-27-4	year	1.16	223	11.1
ortho-Aminoazotoluene	97-56-3	year	0.000909	0.174	0.00872
o-Toluidine	95-53-4	year	0.0196	3.76	0.188
o-Toluidine Hydrochloride	636-21-5	year	0.027	5.18	0.259
o-Xylene	95-47-6	24-hr	221	29.0	1.45
Ozone	10028-15-6	1-hr	180	0.394	0.0197
para-Cresidine	120-71-8	year	0.0233	4.47	0.224
p-Chloro-o-toluidine	95-69-2	year	0.013	2.49	0.125
Pentabromodiphenyl Ether	32534-81-9	24-hr	6	0.789	0.0394
Pentachlorophenol	87-86-5	year	0.217	41.6	2.08
Perchloroethylene	127-18-4	year	0.169	32.4	1.62
Phenacetin	62-44-2	year	1.59	305	15.3
Phenazopyridine	94-78-0	year	0.0204	3.91	0.196
Phenazopyridine hydrochloride	136-40-3	year	0.0233	4.47	0.224
Phenesterin	3546-10-9	year	2.33E-05	0.00447	0.000224
Phenobarbital	50-06-6	year	0.00769	1.48	0.0738
Phenol	108-95-2	24-hr	200	26.3	1.31
Phenoxybenzamine	59-96-1	year	0.00112	0.215	0.0107
Phenoxybenzamine hydrochloride	63-92-3	year	0.0013	0.249	0.0125
Phosgene	75-44-5	24-hr	0.3	0.0394	0.00197
Phosphine	7803-51-2	24-hr	0.8	0.105	0.00526
Phosphoric Acid	7664-38-2	24-hr	7	0.920	0.0460
Phosphorus	7723-14-0	24-hr	20	2.63	0.131
Phthalic Anhydride	85-44-9	24-hr	20	2.63	0.131
p-Nitrosodiphenylamine	156-10-5	year	0.159	30.5	1.53
Polybrominated Biphenyls	--	year	0.000116	0.0223	0.00111
Polychlorinated Biphenyls, NOS	1336-36-3	year	0.00175	0.336	0.0168
Ponceau 3R	3564-09-8	year	0.217	41.6	2.08
Ponceau MX	3761-53-3	year	0.769	148	7.38
Potassium Bromate	7758-01-2	year	0.00714	1.37	0.0685
Procarbazine	671-16-9	year	0.00025	0.048	0.0024
Procarbazine Hydrochloride	366-70-1	year	0.000294	0.0564	0.00282
Propylene	115-07-1	24-hr	3000	394	19.7
Propylene Glycol	57-55-6	24-hr	28.5	3.75	0.187
Propylene Glycol Dinitrate	6423-43-4	24-hr	0.276	0.0363	0.00181
Propylene glycol monomethyl ether	107-98-2	24-hr	7000	920	46.0
Propylene oxide	75-56-9	year	0.27	51.8	2.59
Propylthiouracil	51-52-5	year	0.00345	0.662	0.0331
p-Xylene	106-42-3	24-hr	221	29.0	1.45
Refractory Ceramic Fibers	--	24-hr	0.03 fibers/cm ₃	0.00394	0.000197
Reserpine	50-55-5	year	0.000323	0.062	0.0031
Saffrole	94-59-7	year	0.0159	3.05	0.153
Selenium & Selenium Compounds (other than Hydrogen Selenide)	--	24-hr	20	2.63	0.131
Short-chain (C10-13) chlorinated paraffins	85535-84-8	year	0.04	7.68	0.384
Silica (crystalline, Respirable)	7631-86-9	24-hr	3	0.394	0.0197
Sodium Hydroxide	1310-73-2	1-hr	8	0.0175	0.000876
Sodium Sulfate	7757-82-6	1-hr	120	0.263	0.0131
Sterigmatocystin	10048-13-2	year	1.00E-04	0.0192	0.000959

Common Name	CAS #	Averaging Period	ASIL (µg/m³)	SQER (lb/averaging period)	De Minimis (lb/averaging period)
Streptozotocin	18883-66-4	year	3.23E-05	0.0062	0.00031
Styrene	100-42-5	24-hr	900	118	5.91
Styrene Oxide	96-09-3	year	0.0217	4.16	0.208
Sulfallate	95-06-7	year	0.0185	3.55	0.178
Sulfur dioxide	7446-09-05	1-hr	660	1.45	0.457
Sulfur Mustard	505-60-2	24-hr	0.7	0.0920	0.00460
Sulfuric Acid	7664-93-9	24-hr	1	0.131	0.00657
Tetrabromodiphenyl Ether	40088-47-9	24-hr	6	0.789	0.0394
Thioacetamide	62-55-5	year	0.000588	0.113	0.00564
Thiourea	62-56-6	year	0.0476	9.13	0.457
Titanium Tetrachloride	7550-45-0	24-hr	0.1	0.0131	0.00657
Toluene	108-88-3	24-hr	5000	657	32.9
Toluene-diisocyanates	26471-62-5	24-hr	0.07	0.00920	0.000460
Toluene-2,4-diisocyanate	584-84-9	24-hr	0.07	0.00920	0.000460
Toluene-2,6-diisocyanate	91-08-7	24-hr	0.07	0.00920	0.000460
Toxaphene	8001-35-2	year	0.00294	0.564	0.0282
Trans-1,2-dichloroethene	156-60-5	24-hr	807	106	5.30
Trans-2[(dimethylamino)-methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole	55738-54-0	year	0.00769	1.48	0.0738
Trichloroethylene	79-01-6	year	0.5	95.9	4.8
Triethylamine	121-44-8	24-hr	200	26.3	1.31
Tris-(1-Aziridinyl)phosphine sulfide	52-24-4	year	0.000294	0.0564	0.00282
Tris(2,3-dibromopropyl)phosphate	126-72-7	year	0.00152	0.292	0.0146
Tryptophan-P-1	62450-06-0	year	0.000135	0.0259	0.0013
Tryptophan-P-2	62450-07-1	year	0.0011	0.211	0.0106
Vanadium	7440-62-2	24-hr	0.2	0.0263	0.00131
Vanadium Pentoxide	1314-62-1	1-hr	30	0.0657	0.00329
Vinyl acetate	108-05-4	24-hr	200	26.3	1.31
Vinyl Bromide	593-60-2	24-hr	3	0.394	0.00197
Vinyl Chloride	75-01-4	year	0.0128	0.46	0.123

NOS - Not otherwise specified. This applies to situations where emission factors for a group of pollutants is reported, but specific isomers, congeners, or chemicals are not reported.

REPEALER

The following sections of the Washington Administrative Code

are repealed:

WAC 173-460-110 WAC 173-460-120

Acceptable source impact levels. Scientific review and amendment of acceptable source impact levels and lists.

WAC 173-460-130
WAC 173-460-160

Fees.
Class B toxic air pollutants and acceptable source impact levels.