RULES
OF
THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL

CHAPTER 1200-03-31
CASE-BY-CASE DETERMINATIONS OF HAZARDOUS AIR POLLUTANT CONTROL REQUIREMENTS

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1200-03-31-.01 RESERVED.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.02 DEFINITIONS - The following definitions are applicable to this chapter:

(1) "Major Source" means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year of any combination of hazardous air pollutants. In addition, the provisions of subpart (11)(b)14.(i) of Rule 1200-03-09-.02 are recognized as to the grouping or aggregation of emissions for the purpose of calculating emission potential as it relates to the applicability thresholds of this definition. Additionally, electric utility steam generating units will not be regulated as major sources until the United States Environmental Protection Agency decides that they should be so regulated pursuant to Section 112(n) of the Federal Clean Air Act.

(2) "Area Source" means any stationary source of hazardous air pollutants that is not a major source. Mobile sources such as vehicles, trains, planes, ships, et cetera are not area sources.

(3) "New Source" means a stationary source that emits hazardous air pollutants as they are defined in this paragraph and is constructed or reconstructed on or after the date that the United States Environmental Protection Agency approves the major source operating permit program submitted by the State of Tennessee in accordance with Section 502(d) of the Federal Clean Air Act.

(4) "Stationary Source" shall have the meaning given to it in subparagraph (1)(ddd) of Rule 1200-03-02-.01.

(5) "Existing Source" is any stationary source that emits hazardous air pollutants as they are defined in paragraph (6) of this rule and is not a new source.

(6) "Hazardous Air Pollutant" - means any of the following air contaminants:

(Rule 1200-03-31-.02, continued)

CAS No.	Chemical name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate(DEHP)
542881	Bis(chloromethyl) ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichloro benzidene

(Rule 1200-03-31-.02, continued)

111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl Chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichlorethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)

(Rule 1200-03-31-.02, continued)

108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloronaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4'-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Arochlors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachoroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate

(Rule 1200-03-31-.02, continued)

593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide compounds[1]
0	Glycol ethers[2, 6]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers[3]
0	Nickel Compounds
0	Polycyclic Organic Matter[4]
0	Radionuclides (including radon)[5]
0	Selenium Compounds

(7) "Federal Clean Air Act" means the federal statutes found at 42 U.S.C. 7401 et seq. as amended by Public Law No. 101-549 (November 15, 1990).

(8) "MACT" means maximum achievable control technology. It is a case-by-case determination of what constitutes a maximum achievable reduction of hazardous air pollutants considering the costs of achieving the emission reduction and any non-air quality health and environmental impacts and energy requirements. MACT may include but is not limited to: control equipment, work practice standards, emission standards, process modifications, or raw materials substitution and/or reformulation.

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[1] X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$

[2] Include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-$(OCH_2CH_2)_n$-OR'.
Where:
n = 1, 2, or 3:
R = alkyl C7 or less; or
R = phenyl or alkyl substituted phenyl;
R' = H or alkyl C7 or less; or
OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

This action deletes each individual compound in a group called the surfactant alcohol ethoxylates and their derivatives (SAED) from the glycol ethers category in the list of hazardous air pollutants (HAP) established by section 112(b)(1) of the Clean Air Act (CAA).

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[4] Includes organic compounds with than one benzene ring, and which have a boiling point greater than or equal to 100^0 C.

[5] a type of atom which spontaneously undergoes radioactive decay.

[6] The substance ethylene glycol monobutyl ether (EGBE, 2-Butoxyethanol) (Chemical Abstract Service (CAS) Number 111-76-2) is deleted from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1).

(Rule 1200-03-31-.02, continued)

(9) "GACT" means generally available control technology. It is a case-by-case determination of what constitutes reasonable and proper control for hazardous air pollutants from area sources. GACT may include, but is not limited to: control equipment, work practice standards, emission standards, process modification, or raw materials substitution and/or reformulation.

(10) Reserved.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History****: Original rule filed July 5, 1994; effective September 18, 1994. Amendment filed November 12, 1998; effective January 26, 1999. Amendment filed June 30, 2006; effective October 27, 2006. Amendment filed October 17, 2006; effective December 31, 2006. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.03 INTENT OF THE BOARD.

(1) The role of the United States Environmental Protection Agency is recognized by the Board as being essential in the setting of case-by-case determinations of hazardous air pollutant control requirements. The federal Agency is in the unique position to conduct research and compile national data bases as to the source-by-source control levels that are being achieved or proposed in the regulation of hazardous air pollutants. As the State of Tennessee does not fully possess these abilities, the Technical Secretary shall utilize the federal Agency's resources prior to setting a case-by-case hazardous air pollutant requirement. In addition, the Technical Secretary shall recognize any federal law, federal regulation, or lawfully promulgated policy of the United States Environmental Protection Agency pertaining to case-by-case determinations of hazardous air pollutant requirements as the minimum acceptable criteria prior to the setting of a case-by-case hazardous air pollutant requirement under the provisions of this rule.

(2) The Technical Secretary may consider other applicable criteria in the absence of any data or requirement of the United States Environmental Protection Agency. In such case, the Technical Secretary shall rely upon generally accepted engineering principles and any unique aspects of a source category as a whole that would be a prohibitory factor in the imposition of a requirement for industries in that source category.

(3) To the extent possible, it is the Board's intent to impose MACT and GACT limitations equivalent to that required by the United States Environmental Protection Agency at the time of the case-by-case determination. Should there be a prudent reason to be more stringent than the federal equivalent, the Technical Secretary may issue a more stringent MACT or GACT requirement. In exercise of the authority to issue a more stringent requirement, the Technical Secretary shall issue a determination specifying the rationale employed in the setting of a more stringent requirement. The determination shall accompany the permit in which the case-by-case determination is declared. As the declaration of a case-by-case requirement will be specified on a permit, disputes regarding the imposition of MACT or GACT are to be resolved in the manner prescribed by Rule 1200-03-09-.05. If GACT is done on a permit-by-rule basis, the Board will view the public hearing process as the permittee's opportunity to object to the requirements of GACT. However, the permittee may appeal the applicability of GACT to their operations as to commenced date or emission/production magnitude applicability thresholds present at their source.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.04 STANDARD FOR EXISTING SOURCES.

(1) Major sources will be issued an operating permit pursuant to the provisions of paragraph (11) of Rule 1200-03-09-.02 listing their current hazardous air pollutant emission rate on a pollutant-by-pollutant basis. These “hollow permits” will remain in effect until one or more of the following activities occur:

(a) When the United States Environmental Protection Agency promulgates MACT for a source-specific category pursuant to Sections 112(d) or (h) of the Federal Clean Air Act, the Technical Secretary shall specify MACT for all existing major sources in that category as a revision to their “hollow permit”. Upon written notification from the Technical Secretary, the source shall have 180 days to prepare their application for a MACT permit revision and submit it to the Technical Secretary. The Technical Secretary shall process the application by issuing a permit within 9 months of receipt of a complete application. MACT revisions to hollow permits shall be issued within 18 months of promulgation. A compliance schedule to attain MACT by a date certain shall be made part of the permit. The length of the schedule to attain compliance shall be determined by the complexities of coming into compliance and the Board's intent to be equivalent to the federal MACT. The Technical Secretary shall provide that the source's compliance schedule is at least as long as the federal rules allow. In most areas, this should not exceed three years. The Technical Secretary is authorized to grant up to a one-year extension to comply as long as it does not conflict with the federal requirements and there is sufficient justification to grant the additional time.

(b) If the United States Environmental Protection Agency fails to meet the Federal Clean Air Act schedules prescribed in Section 112(e)(1) and/or (3) for timely promulgation of MACT requirements thereby invoking the “MACT hammer” provisions at Section 112(j) of the Federal Clean Air Act, the Technical Secretary shall specify MACT for all sources in the source category in question as a permit revision to their “hollow permit”. Sources subject to the missed MACT standard shall file a complete MACT permit revision application with the Technical Secretary no later than 18 months after the federally missed deadline for the source category. The Technical Secretary shall process the MACT permit revision application by issuing a permit within 18 months of his receipt of a complete application.

(2) Area sources that are not exempt from the requirement to obtain a permit pursuant to Rule 1200-03-09-.04 will be issued an operating permit specifying GACT with an appropriate compliance schedule to achieve that requirement by a date certain within 18 months of the United States Environmental Protection Agency's promulgation of a source-specific GACT standard if they are in that source-specific category. The date to achieve compliance shall be no less than that allowed by the federal rule which promulgated GACT for that source category. If a source is not exempted from the requirement to obtain a permit pursuant to Rule 1200-03-09-.04, it shall be the duty of such area source owner or operator to register their annual emissions of hazardous air pollutants with the Technical Secretary utilizing the forms prescribed by the Technical Secretary. In the interest of efficiency, the Technical Secretary may bring proposed regulations to the Board that would permit area sources by rule on a source category-specific basis. It is the intent of the Board that such rule would be effective within 18 months of the federal GACT promulgation. The rule will also provide that compliance with GACT shall be attained no later than that specified by the equivalent federal rule.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendment filed December 15, 1997; effective February 28, 1998. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.05 STANDARD FOR NEW SOURCES.

(1) Major sources shall utilize MACT as prescribed by the Technical Secretary upon start up regardless of whether or not the United States Environmental Protection Agency has established MACT under Section 112(d) or (h) of the Federal Clean Air Act. MACT shall be prescribed on the source's construction permit and transferred to the source's operating permit upon start up of the facility.

(2) Area sources that are not exempt from the requirement to obtain a permit in accordance with Rule 1200-03-09-.04 shall utilize GACT as prescribed by the Technical Secretary upon start up if the United States Environmental Protection Agency has established GACT under Section 112(d)(5) of the Federal Clean Air Act. GACT shall be prescribed on the source's construction permit and transferred to the source's operating permit upon start up of the facility.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendment filed December 12, 1997; effective February 25, 1998. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.06 OPPORTUNITY FOR EARLY REDUCTIONS SCHEDULE.

(1) The owner or operator of an existing source of hazardous air pollutants may be issued an operating permit allowing six additional years to comply with a future MACT commencing on the compliance date of that MACT limit if each of the following criteria are satisfied:

(a) The source will utilize control and/or work practices that will result in a 90 per centum or more reduction in emissions of hazardous air pollutants (95 per centum in the case of hazardous air pollutants which are particulates).

1. The reduction shall be determined with respect to verifiable and actual emissions in a base year not earlier than calendar year 1987.

2. If there is evidence that emissions in the base year 1987, or any subsequent base year, are artificially or substantially greater than emissions in other years prior to the implementation of the early emission reductions, the Technical Secretary shall require the use of an arithmetic average of the years commencing upon the suspect year and ending upon the period of time when the person seeking the early reductions schedule files their plan for the purpose of determining base year emission levels.

3. The Technical Secretary may allow a source to use 1985 or 1986 emission data for the purpose of determining base year emissions if the source has submitted such data to the Technical Secretary in a form that can be used to make the baseline calculations and further that such information was in the Technical Secretary’s possession prior to November 15, 1990.

(2) The early emission reduction must occur prior to the federal proposal of a source category-specific MACT standard to which the source will be subject. Federal proposal will be considered effective when the United States Environmental Protection Agency publishes the standard in the *Federal Register*. The reduction need not actually occur prior to the federal proposal if the source owner or operator has committed to an enforceable schedule that extends no further than January 1, 1994.

(3) A major source operating permit must be issued to the source owner or operator pursuant to the provisions of paragraph (11) of Rule 1200-03-09-.02 detailing the schedule to attain the early emission reductions and the enforceable emission limit that is to be attained. For the

(Rule 1200-03-31-.06, continued)

purposes of this paragraph, the Technical Secretary shall issue the permit within nine months of a complete application.

(4) The early reductions of less toxic hazardous air pollutants shall not be credited toward the reduction of highly toxic hazardous air pollutants (such as, but not limited to chlorinated dioxins and furans) that pose high risks of adverse public health effects associated with exposure to small quantities of such highly toxic hazardous air pollutants. The Technical Secretary shall use the relative risks of chlorinated dioxins and furans as a qualitative benchmark in determining whether or not a hazardous air pollutant is highly toxic.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.07 RESIDUAL RISK AND REVISIONS TO MACT.

(1) MACT standards are subject to revision if the United States Environmental Protection Agency determines that the existing MACT standards are insufficient to protect the public pursuant to the residual risk provisions of Section 112(f) of the Federal Clean Air Act. Upon such finding, the Technical Secretary shall modify previously set MACT limitations in that source category to conform to the federally promulgated revised MACT standards within 18 months of such federal promulgation. The modification will be a permit revision to the source's operating permit consistent with the provisions of paragraph (11) of Rule 1200-03-09-.02. The Technical Secretary shall prescribe a compliance schedule on the permit amendment that will specify an expeditious date to attain compliance with the revised MACT standards. The length of the schedule will be determined by the complexities of coming into compliance and the Board's desire to be equivalent to any federally revised MACT requirements.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed July 5, 1994; effective September 18, 1994. Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.08 THROUGH 1200-03-31-.12 RESERVED.

Authority: *T.C.A. §§ 4-5-201, et seq. and 68-201-101, et seq.* ***Administrative History:*** *Amendments filed September 29, 2022; effective December 28, 2022.*

1200-03-31-.13 RESERVED.

Authority: *T.C.A. §§ 4-5-201, et seq.; 68-201-101, et seq.; and 68-201-105.* ***Administrative History:*** *Original rule filed May 10, 1994; effective July 24, 1994. Amendment filed August 28, 1997; effective November 11, 1997. Amendments filed September 29, 2022; effective December 28, 2022.*