

CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR POLLUTION CONTROL BOARD

**AIR MANAGEMENT REGULATION VI
CONTROL OF EMISSIONS OF TOXIC AIR CONTAMINANTS**

Originally Approved By:

Air Pollution Control Board..... June 9, 1981
Board of Health..... July 1, 1981
Department of Law July 2, 1981
Department of Records August 7, 1981

Approved by Air Pollution Control Board April 28, 2022
Approved by Law Department April 29, 2022
Filed with the Department of Records..... May 2, 2022
Legal Notice of Public Hearing July 11, 2022
Public Hearing August 10, 2022

Subsequent to the Public Hearing, the proposed Regulation was adopted with modification:

Approved by Air Pollution Control Board April 27, 2023
Approved by Law Department May 2, 2023
Filed with the Department of Records..... May 3, 2023
Effective Date January 1, 2024

**PREAMBLE TO
AIR MANAGEMENT REGULATION VI
Control of Emissions of Toxic Air Contaminants**

This Regulation is adopted pursuant to Title 3, Air Management Code, of the Philadelphia Code which reads in part as follows:

SECTION 3-201. GENERAL PROVISIONS

* * *

(3) (a) No person shall emit any toxic air contaminant unless, within six months of the adoption of regulations by the Air Pollution Control Board listing toxic air contaminants, he provides notice to the Department including a Material Safety Data Sheet as described in Section 3-301(24) in accordance with the requirements and procedures established in regulations promulgated by the Air Pollution Control Board pursuant to this subsection.

If a person discharges a toxic air contaminant on the list established by the Air Pollution Control Board for the first time, that person shall provide the Department with proper notice no more than thirty days after its emission into the atmosphere.

The person responsible for any source of air contaminants affected by any subsequent additions to the list of toxic substances established in the regulations of the Air Pollution Control Board shall similarly file notice with the Department within ninety days of the effective date of any revision to such list.

(b) The Department shall maintain a file of all notices relating to toxic air contaminants and shall make the file available for public inspection and reproduction during normal business hours.

(c) Within six months of the adoption of this subsection by the City Council, the Air Pollution Control Board shall promulgate regulations establishing a list of toxic air contaminants to which the provisions of this subsection shall be applicable, the form of the notice and request to be provided to the Department by any affected source of air contaminant emissions, and the reporting requirements and procedures related thereto.

The following factors may be considered by the Board in establishing the list of toxic air contaminants:

- (.1) risk of immediate acute or subacute harm to human health, at concentrations likely to be encountered in the community;
- (.2) proven carcinogenicity through epidemiological studies in both human and animal populations;
- (.3) suspected carcinogenicity as shown in human epidemiological studies or in

laboratory studies of animals and other experimental media;

(.4) mutagenicity and teratogenicity as proven through human, animal, and experimental media;

(.5) bioaccumulative effects in humans and the environment;

(.6) findings of the Environmental Protection Agency, the Occupational Safety and Health Administration or other such agencies regarding toxicity;

(.7) extent to which the substance is likely to be found in Philadelphia industries;

(.8) other such factors necessary for the proper regulation of toxic air contaminants.

The Air Pollution Control Board shall, as appropriate, update and revise the list of toxic air contaminants subject to the provisions of this subsection on the basis of the latest available relevant scientific information.”

* * *

SECTION 3-301. POWERS AND DUTIES OF THE DEPARTMENT OF PUBLIC HEALTH.

The Department of Public Health shall have the following powers and duties:

* * *

* * *

- (24) The Department shall obtain a Material Safety Data Sheet (MSDS) for each toxic air contaminant subject to the notice requirement. Such MSDS shall be provided to the Department by the person responsible for the affected source of emission as part of the notice requirements in subsection 3-201(3)(c). The Department shall include these MSDS in the file of notices regarding the emission of toxic air contaminants and shall make this file available to the public for inspection and reproduction during normal business hours. The MSDS shall conform to the format and contain the type of information required by the U.S. Department of Labor form OSHA 20, Material Safety Data Sheet (latest edition).
- (25) The Department shall have the authority to require persons subject to Section 3-201(c)(1) to take all necessary measure to bring their emission of toxic air contaminants into compliance with the Code and regulations promulgated thereunder."

SECTION 3-302. POWERS AND DUTIES OF THE AIR POLLUTION CONTROL BOARD.

The Air Pollution Control Board shall have the following powers and duties:

- (1) To promulgate regulations, implementing this Title, preventing degradation of air quality, preventing air pollution nuisances, and limiting, controlling, or prohibiting the emission of air contaminants to the atmosphere from any sources. Such regulations may include, but are not limited to, the following:
 - (a) the concentration, volume, weight, and other characteristics of emissions of air contaminants to the atmosphere, the circumstances under which

such emissions are permitted, and the degree of control of emissions of air contaminants required;

- (b) the emissions of air contaminants to the atmosphere and related actions which are prohibited;
- (c) the types and kinds of control measures and actions, equipment, storage and handling facilities, processes and systems, including specifications and/or performance requirements which may be required to control or eliminate emissions of air contaminants to the atmosphere;

* * *

* * *

- (i) the substances to be considered toxic air contaminants under this Title and regulations for reporting the emission of these toxic air contaminants to the Department.”

- A. Pursuant to the above citations, this Regulation establishes a list of toxic air contaminants to which this Regulation is applicable; prescribes notice requirements for emitters of listed toxic air contaminants; provides for public access to information concerning the emission of toxic air contaminants; and limits, controls or prohibits the emission of toxic air contaminants.

AIR MANAGEMENT REGULATION VI
CONTROL OF EMISSIONS OF TOXIC AIR CONTAMINANTS

SECTION I. DEFINITIONS

The following definitions are in the Air Management Code, Title 3 of the Philadelphia Code, and apply to this Regulation:

1. *Air Contaminant* – Any smoke, soot, flyash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, mists, aerosols, vapors, odors, toxic or radioactive substances, water, particulate, solid, liquid or gaseous matter, or any other materials in the outdoor atmosphere.
2. *Board* – Means the Air Pollution Control Board.
3. *Department* – The Department of Public Health, Health Commissioner or any authorized representative thereof.
4. *Facility* – The area, buildings, and equipment used by any person at a single location in the conduct of business.
5. *Person* – Any individual, natural person, syndicate, association, partnership, firm, corporation, institution, agency, authority, department, bureau, or instrumentality of federal, state or local government or other entity recognized by law as a subject of rights and duties.
6. *Toxic Air Contaminant* – A chemical substance or material the discharge of which into the atmosphere, based upon relevant available scientific evidence establishing the toxic, mutagenic and/or carcinogenic effects of such substance or material, may pose a potential hazard to the community in terms of a significant increase in risk of acute or long-term health effects. As used in this Regulation, toxic air contaminant shall mean any substance or material listed in the appendix to this Regulation.

SECTION II. NOTICE REQUIREMENTS

A. Notice of Emission

No person shall cause, suffer, allow or permit to escape or to be discharged into the atmosphere, from any facility for which a permit or license is required by the Air Management Code or any regulation promulgated thereto any toxic air contaminant except where written notice has been filed with the Department. Notice in accordance with this Section shall be filed at the time a permit or license, required by Air Management Code or any regulation promulgated thereto, is sought.

(1) Notice shall be made on a form as prescribed by the Department and may require applicants to identify the toxic air contaminants emitted; the associated areas or operations within the facility from which the toxic air contaminants are emitted; and provide estimates of the maximum hourly, daily and annual emission rates for each toxic air contaminant emitted from the specified areas or operations within facility.

B. Public Access

The Department shall establish and maintain, for a minimum of 30 years, a file of notices concerning the emission of toxic air contaminants and shall make the file available to the public subject to Section IV(B)(2) for inspection and reproduction during normal business hours. The Department may charge a reasonable fee for the cost of reproduction.

C. Exemptions

Facilities seeking permits or licenses for the following sources or activities, as required by Air Management Code or any regulation promulgated thereto, are exempted from the notice requirements set forth in this Section:

- (1) Any demolition, implosion, earthworks, or other activity for which a Dust Control Permit is required pursuant to Air Management Regulation II. § IX.B.
- (2) Any construction or modification of a parking facility or other Complex Source for which a Complex Source Permit is required pursuant to Air Management Regulation X. Section II.
- (3) Any construction, modification, or operation of an automotive facility for which an installation permit or license is required pursuant to Air Management Regulation XII. Section II.
- (4) Operation of a facility pursuant to a permit for non-Title V sources issued by the Department pursuant to 25 Pennsylvania Code Chapter 127, Subchapter F as adopted by reference in Air Management Regulation XIII.
- (5) Operation of sources at a facility pursuant to an annual or indefinite license issued pursuant to the Air Management Code.

SECTION III. REGISTRATION, REVIEW AND APPROVAL REQUIREMENTS

A. Permits and Licenses

- (1) The person responsible for any facility affected by this Regulation shall comply with all applicable permit and license requirements as specified by the Air Management Code and the Air Management Regulations promulgated thereunder.

- (2) The Department shall require the applicant for, or holder of, any permit or license, or the person responsible, for any facility affected by this Regulation to take all necessary measures to prevent, control or limit the discharge or escape of toxic air contaminants so that the emissions do not pose a health hazard.
- (3) For facilities subject to the notice of emission requirements of Section II of this Regulation, the Department shall grant or deny any permit or license sought pursuant to the Air Management Code and the Air Management Regulations promulgated thereunder in accordance with the conditions set forth in (C) below.

B. Review of Toxic Air Contaminant Emissions

- (1) The Department shall establish or approve procedures, guidelines and methods to be used in the review and evaluation of toxic air contaminant emissions. The Board hereby approves the reporting thresholds for toxic air contaminants as set forth in the Technical Guidelines for Air Management Regulation VI attached as Exhibit A to this Regulation and the procedures for conducting health risk assessments for said toxic air contaminants as set forth in Exhibit A and in the Health Risk Assessment Technical Support Document for Air Management Regulation VI Amendment attached as Exhibit B. The Department is hereby authorized to update the documents as necessary, provided that substantial changes are submitted to the Board for approval.
- (2) The Department shall verify all notices of emission filed pursuant to Section II of this Regulation and may require from the person responsible for any source of toxic air contaminant emissions such additional information as may be necessary to perform the evaluation required in (C) below.
- (3) The Department shall review the existing air toxics concentrations surrounding the emissions source at issue prior to approving or disapproving a Title V operating permit.

C. Conditions of Approval

- (1) Approval of any permit or license pursuant to this Section is contingent on a determination by the Department that such emission or discharge will not pose an undue health hazard, as per the Technical Guidelines for Air Management Regulation VI.
- (2) The Department shall require the applicant for any permit or license for any source of toxic air contaminants affected by this Regulation to submit an assessment of health risk or hazard if the source has the potential to emit at least one toxic air contaminant in an amount above reporting thresholds established in the Department's guidelines. Assessments of health risk or hazard shall be compiled

using the Risk Screening Workbook attached as Exhibit C. Exhibit C may be updated at the discretion of the Department.

- (3) The Department's determination shall be based upon an evaluation of the quantity, concentration and duration of the emission relative to the latest available information regarding health effects, guidelines or standards associated with the toxic air contaminant, or upon such other information the Department considers relevant to the evaluation.

Based on this evaluation, the Department shall:

- (a) Approve a permit or license application, or license renewal, as submitted; renew said permit or license, subject to adoption of work practices, emission controls, emission limits, process changes, and other conditions necessary to address the health hazard posed by the toxic air contaminants; or
- (b) disapprove a permit or license application, or license renewal of said permit or license.

SECTION IV. ADDITIONAL REPORTING REQUIREMENTS

A. Information Reporting

- (1) In addition to the Notice requirements of Section II, the person responsible for any source of emission of a listed toxic air contaminant shall, upon notification from the Department, provide such information as will disclose the quantity, concentration and duration of such emissions, which are or may be discharged, or any other technical data as may be required by the Department to determine compliance with applicable emission guidelines, standards, limitations or control measures established by the Department.
- (2) The required information shall be submitted by the responsible person on reporting forms supplied by the Department and shall be complete. The required information shall be submitted to the Department within 30 days from the receipt of the notice and form, unless a written request for an extension has been made and granted by the Department.
- (3) Information recorded on or copies of reporting forms submitted to the Department shall be retained by the responsible person for two years after the date on which the pertinent report was submitted.

B. Availability of Information

- (1) Information obtained from reporting forms submitted to and verified by the Department shall be correlated with applicable emission guidelines, standards, limitations or control measures established by the Department. All such emissions data shall be available for public inspection at the Department during normal business hours.
- (2) Any records, reports, information, or particular part thereof, other than emissions data, relating to secret processes, methods of manufacture or production, or otherwise entitled to protection as trade secrets, provided to, required or obtained by the Department shall be kept confidential.

SECTION V. APPLICABILITY

- A. The provisions of this Regulation shall be applicable in addition to any other provisions set forth elsewhere in the Regulations of the Air Pollution Control Board, unless an exemption has been provided herein.
- B. Nothing contained in this Regulation shall be taken to excuse or relieve any person from complying with other applicable provisions of the Philadelphia Code and regulations adopted pursuant thereto, or with applicable laws of Pennsylvania or the United States.

SECTION VI. SEVERABILITY

The provisions of this Regulation are severable. If any provision or part thereof is held to be unenforceable, the remaining provisions or parts thereof shall remain in effect. It is hereby declared to be the intent of the Board that this Regulation would have been adopted if the unenforceable provision or part had not been included.

SECTION VII. EFFECTIVE DATE

This Regulation shall become effective on January 1, 2024.

APPENDIX TO AIR MANAGEMENT REGULATION VI

Control of Emissions of Toxic Air Contaminants

The following substances and materials shall be considered toxic air contaminants for the purpose of this Regulation and shall be subject to the provisions and requirements set forth therein.

No.	CAS Number	Toxic Air Contaminant / Hazardous Air Pollutant
1	75070	Acetaldehyde
2	60355	Acetamide
3	75058	Acetonitrile
4	98862	Acetophenone
5	53963	2-Acetylaminofluorene
6	107028	Acrolein
7	79061	Acrylamide
8	79107	Acrylic acid
9	107131	Acrylonitrile
10	107051	Allyl chloride
11	92671	4-Aminobiphenyl
12	62533	Aniline
13	90040	o-Anisidine
14	140578	Aramite
15	1332214	Asbestos (1)
16	71432	Benzene
17	92875	Benzidine (4,4'-Biphenyldiamine)
18	98077	Benzotrichloride
19	100447	Benzyl chloride (Chloromethylbenzene)
20	92524	Biphenyl
21	117817	Bis(2-ethylhexyl) phthalate (DEHP)
22	542881	Bis(chloromethyl)ether
23	75252	Bromoform

24	106945	1-Bromopropane (n-Propyl Bromide)
25	106990	1,3-Butadiene
26	156627	Calcium cyanamide
27	133062	Captan
28	63252	Carbaryl
29	75150	Carbon disulfide
30	56235	Carbon tetrachloride (Tetrachloromethane)
31	463581	Carbonyl sulfide
32	120809	Catechol
33	133904	Chloramben
34	57749	Chlordane
35	7782505	Chlorine
36	79118	Chloroacetic acid
37	532274	2-Chloroacetophenone
38	108907	Chlorobenzene
39	510156	Chlorobenzilate (Ethyl-4,4'-dichlorobenzilate)
40	67663	Chloroform (Trichloromethane)
41	107302	Chloromethyl methyl ether (CMME)
42	126998	Chloroprene (2-Chloro-1,3-butadiene)
43		Cresols (Cresylic acid, Cresol mixers)
44	95487	o-Cresol
45	108394	m-Cresol
46	106445	p-Cresol
47	98828	Cumene
48	72559	DDE (Dichlorodiphenyldichloroethylene)
49	50293	DDT/DDD
50	334883	Diazomethane
51	132649	Dibenzofurans
52	96128	1,2-Dibromo-3-chloropropane
53	84742	Dibutylphthalate

54	106467	1,4-Dichlorobenzene
55	91941	3,3-Dichlorobenzidine
56	111444	Dichloroethyl ether (Bis(2-chloroethyl) ether)
57	542756	1,3-Dichloropropene
58	62737	Dichlorvos
59	60571	Dieldrin
60	111422	Diethanolamine
61	121697	N,N-Dimethylaniline
62	64675	Diethyl sulfate
63	119904	3,3-Dimethoxybenzidine
64	60117	4-Dimethyl aminoazobenzene
65	119937	3,3'-Dimethyl benzidine (o-Tolidine)
66	79447	Dimethyl carbamoyl chloride
67	68122	Dimethyl formamide
68	57147	1,1-Dimethyl hydrazine (Asymmetric dimethyl hydrazine)
69	131113	Dimethyl phthalate
70	77781	Dimethyl sulfate
71	534521	4,6-Dinitro-o-cresol
72	51285	2,4-Dinitrophenol
73	121142	2,4-Dinitrotoluene
74	123911	1,4-Dioxane (1,4-Diethyleneoxide)
75	122667	1,2-Diphenylhydrazine
76	106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
77	106887	1,2-Epoxybutane
78	140885	Ethyl acrylate
79	100414	Ethyl benzene
80	51796	Ethyl carbamate (Urethane)
81	75003	Ethyl chloride (Chloroethane)
82	106934	Ethylene dibromide (1,2-Dibromoethane)

83	107062	Ethylene dichloride (1,2-Dichloroethane)
84	107211	Ethylene glycol
85	151564	Ethylene imine (Aziridine)
86	75218	Ethylene oxide
87	96457	Ethylene thiourea (1,3-Ethylene-2-thiourea)
88	75343	Ethylidene dichloride (1,1-Dichloroethane)
89	50000	Formaldehyde
90	76448	Heptachlor
91	118741	Hexachlorobenzene
92	87683	Hexachlorobutadiene (Hexachloro-1,3-butadiene)
93	608731	Hexachlorocyclohexane [technical grade]
94	58899	<i>gamma</i> -Hexachlorocyclohexane (Lindane)
95	77474	Hexachlorocyclopentadiene
96	67721	Hexachloroethane
97	822060	Hexamethylene-1,6-diisocyanate
98	680319	Hexamethylphosphoramide
99	110543	Hexane
100	302012	Hydrazine (Diamine)
101	7647010	Hydrogen chloride (Hydrochloric acid)
102	7664393	Hydrogen fluoride (Hydrofluoric acid)
103	123319	Hydroquinone
104	78591	Isophorone
105	108316	Maleic anhydride
106	67561	Methanol
107	72435	Methoxychlor
108	74839	Methyl bromide (Bromomethane)
109	74873	Methyl chloride (Chloromethane)
110	71556	Methyl chloroform (1,1,1-Trichloroethane)
111	60344	Methyl hydrazine

112	74884	Methyl iodide (Iodomethane)
113	108101	Methyl isobutyl ketone (MIBK; Hexone)
114	624839	Methyl isocyanate
115	80626	Methyl methacrylate
116	1634044	Methyl tert butyl ether (MTBE)
117	101144	4,4-Methylene bis(2-chloraniline)
118	75092	Methylene chloride (Dichloromethane)
119	101779	4,4'-Methylene dianiline
120	101688	4,4-Methylene diphenyl diisocyanate (MDI)
121	91203	Naphthalene
122	98953	Nitrobenzene
123	92933	4-Nitrobiphenyl
124	100027	4-Nitrophenol
125	79469	2-Nitropropane
126	55185	N-Nitrosodiethylamine
127	62759	N-Nitrosodimethylamine
128	59892	N-Nitrosomorpholine
129	684935	N-Nitroso-N-methylurea
130	56382	Parathion
131	82688	Pentachloronitrobenzene (Quintobenzene)
132	87865	Pentachlorophenol
133	108952	Phenol
134	106503	p-Phenylenediamine
135	75445	Phosgene
136	7803512	Phosphine
137	7723140	Phosphorus
138	85449	Phthalic anhydride
139	1336363	Polychlorinated biphenyls (PCBs; Aroclors)
140	1120714	1,3-Propane sultone (3-Hydroxyl-1-propane sulfonic acid sulfone)

141	57578	<i>beta</i> -Propiolactone (3-Hydroxypropanoic acid lactone)
142	123386	Propionaldehyde
143	114261	Propoxur (Baygon)
144	78875	Propylene dichloride (1,2-Dichloropropane)
145	75569	Propylene oxide (1,2-Epoxypropane)
146	75558	1,2-Propylenimine (2-Methyl aziridine)
147	91225	Quinoline
148	106514	Quinone
149	100425	Styrene
150	96093	Styrene oxide
151	2699798	Sulfuryl fluoride
152	1746016	2,3,7,8-Tetrachlorodibenzo(p)dioxin (2,3,7,8-TCDD; Dioxin)
153	79345	1,1,2,2-Tetrachloroethane
154	127184	Tetrachloroethylene (Perchloroethylene)
155	7550450	Titanium tetrachloride
156	108883	Toluene
157	95807	2,4-Toluene diamine (2,4-Diaminotoluene)
158	584849	2,4-Toluene diisocyanate
159	95534	o-Toluidine
160	8001352	Toxaphene
161	120821	1,2,4-Trichlorobenzene
162	79005	1,1,2-Trichloroethane
163	79016	Trichloroethylene
164	95954	2,4,5-Trichlorophenol
165	88062	2,4,6-Trichlorophenol
166	121448	Triethylamine
167	1582098	Trifluralin
168	540841	2,2,4-Trimethylpentane

169	108054	Vinyl acetate
170	593602	Vinyl bromide (Bromoethene)
171	75014	Vinyl chloride
172	75354	Vinylidene chloride (1,1-Dichloroethylene)
173		Xylenes (mixed isomers)
174	95476	o-Xylenes
175	108383	m-Xylenes
176	106423	p-Xylenes
177		Antimony compounds (2)
178	7783702	Antimony pentafluoride
179	1309644	Antimony trioxide
180	1345046	Antimony trisulfide
181		Arsenic compounds (2)
182	7784421	Arsine
183		Beryllium compounds (2)
184		Cadmium compounds (2)
185	130618	Cadmium oxide
186		Chromium VI (Total) (2)
187	744084	Cobalt metal and compounds (2)
188	10210681	Cobalt carbonyl
189	62207765	Fluomine
190		Coke oven emissions (2)
191		Cyanide compounds (including Hydrogen cyanide) (2)
192	94757	2,4-D, salts and esters (2)
193		Glycol ethers (2)
194	111762	Ethylene glycol monobutyl ether (2-Butoxyethanol; EGBE)
195	110805	Ethylene glycol monoethyl ether (2-Ethoxy ethanol)

196	111159	Ethylene glycol monoethyl ether acetate
197	109864	Ethylene glycol monomethyl ether (2-Methoxy ethanol)
198		Lead and compounds (2)
199	78002	Tetraethyl lead
200	7439965	Manganese and compounds (2)
201	12108133	Methylcyclopentadienyl manganese
202		Mercury compounds (2)
203	7439976	Mercury (inorganic)
204		Nickel compounds (2)
205	13463393	Nickel carbonyl
206	1313991	Nickel oxide
207		Polycyclic organic matter (POM) & Polycyclic aromatic hydrocarbons (PAHs) (2)
208	56553	Benz(a)anthracene
209	225514	Benz(c)acridine
210	50328	Benzo(a)pyrene (3,4-benzopyrene)
211	205992	Benzo(b)fluoranthene
212		Selenium compounds (2)
213	7783075	Hydrogen selenide
214	7488564	Selenium sulfide (mono- and di-)
215	13410010	Sodium selenate
216	10102188	Sodium selenite
217		Total dioxin and furans (3)

- (1) Also see Philadelphia Department of Public Health Asbestos Control Regulation.
- (2) Indicating a chemical compound group; some compounds or subgroups included in this group may also be individually named in this table.
- (3) As defined in Interim Procedures for Estimating Risks Associated with Exposure to Mixtures of Chlorinated-p- Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update by U.S. Environmental Protection Agency.