

ILLINOIS POLLUTION CONTROL BOARD

August 1, 1996

IN MATTER OF: )  
 )  
LISTING OF FEDERAL HAZARDOUS AIR )  
POLLUTANTS, GREAT LAKES )  
COMMISSIONS TOXIC COMPOUNDS )  
AND GREAT WATERS PROGRAM TOXIC )  
COMPOUNDS, AND SOURCE )  
REPORTING FOR ILLINOIS TOXIC AIR )  
CONTAMINANTS: AMENDMENTS TO 35 )  
ILL. ADM. CODE 232 )

R96-4  
(Rulemaking - Air)

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by J. Yi):

Pursuant to Sections 9.5, 27 and 28 of the Environmental Protection Act (Act) (415 ILCS 5/9.5, 27 and 28), the Illinois Environmental Protection Agency (Agency) filed this rulemaking proposal on October 13, 1995. In addition to the proposal the Agency filed a motion to waive certain filing requirements, to expedite the hearing process and to consolidate R90-1(C), In the Matter of: Toxic Air Contaminant List (35 Ill. Adm. Code 232); Reporting Requirements for Emission Sources and R90-1(D), In the Matter of: Toxic Air Contaminant List, Styrene (35 Ill. Adm. Code 232. Appendix A), into this proceeding.

In our order of November 2, 1995 we granted the Agency's motions and found that the filing met the requirements of Sections 27 and 28 of the Act. The Board also accepted this matter for hearing and directed the hearing officer to set this matter for hearing. Additionally, the Board, in separate orders closed the dockets in both R90-1(C) and (D).

The Board held two hearings in this matter. The first hearing was held on February 23, 1996 in Springfield, Illinois. The second hearing was held on April 9, 1996 in Chicago, Illinois. The post-hearing comment period ended May 17, 1996.

Today the Board acts to send this rulemaking proposal for first notice. Pursuant to Section 5.01 of the Illinois Administrative Procedure Act (IAPA) and Section 102.342 of the Board's procedural rules, the IAPA 45-day public comment period will commence upon publication of today's proposal in the Illinois Register, during which the Board will accept written comments from any person. Persons interested in providing additional comment on this proposal should submit such comments in writing to the Clerk of the Board prior to the expiration of this 45-day period. The Board will not hold any hearings beyond those that have already been held unless a written request for hearing is received by the Clerk of the Board.

## PURPOSE OF PROPOSAL

The proposal has two (2) main purposes both of which are connected to the Illinois's Toxic Air Contaminants (ITAC) list. First, the proposal intends to update the ITAC by adding chemicals or substances either listed as federal Hazardous Air Pollutants (HAPs) under Section 112(b) of the Clean Air Act (CAA) as amended in 1990, or targeted as chemicals or compounds of concern under the United States Environmental Protection Agency's (USEPA) "Great Waters" program under Section 112(m) of the CAA to 35 Ill. Adm. Code 232.Appendix A. In addition to updating ITAC, the proposal will require all sources that meet the applicability criteria to submit an ITAC Source Report for the calendar year 1996. Finally the proposal will correct typographical errors in the current ITAC list.

## PROPOSED AMENDMENTS

This portion of the opinion will discuss the proposed amendments to 35 Ill. Adm. Code 232 section by section.

### Section 232.120 Definitions

The proposed amendments to Section 232.120 are to delete definitions no longer applicable to this Part as a result of revisions to 35 Ill. Adm. Code 211 and to add definitions of "commercial fuel", "Illinois Toxic Air Contaminant" (ITAC), "ITAC Source Report", "manufacture", "otherwise use", "prices", and "Toxic Air Contaminant" (TAC). The definition of "commercial fuel" is necessary because Section 9.5(e)(3) of the Act exempts emissions of ITACs from combustion processes using commercial fuel from the source reporting requirements. The definitions of "manufacture", "otherwise use" and "process" have also been added to address applicability thresholds, and these definitions are identical in substance to those in Section 313 of the Emergency Planning and Community Right-to Know Act, Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA 313) (42 U.S.C. 11001 et seq.) The definitions of ITAC and TAC have been added to delineate only those chemicals listed in Appendix A that are subject to this proposal. "ITAC Source Report" has been added as a definition to address what information is required to be reported under this proposal.

Section 232.120 has also been revised to delete the definitions of "New emission source" and "Process unit" since these definitions are inconsistent with, or are no longer necessary because of, earlier revisions to Part 211.

The Agency's proposal to the Board suggested that the definition of "'Emits' or 'Emissions' or 'Emitted'", be deleted because of earlier revisions to Part 211. However contained in the definition of "'Emits' or 'Emissions' or 'Emitted'", is the definition of "Fugitive emission" which is not defined in either Part 201 or 211. The definition of "Fugitive emission" is at Section 203.124. Since Parts 201 and 211 do not contain a

definition of “Fugitive emission” we will delete the definition of “‘Emits’ or ‘Emissions’ or ‘Emitted’” but retain the definition for “Fugitive emission”.

#### Subpart D: Source Identification Requirements

Sections 232.400 through 232.460, contain the requirements relating to source reporting. Section 232.400 states the purpose of Subpart D.

Section 232.410(a) provides the applicability threshold: any source that manufactures, processes, or imports 25,000 lbs. or more of any individual ITAC in any calendar year; or otherwise uses 10,000 lbs. of any individual ITAC in any calendar year. Section 232.410(b) lists those processes or operations that are not subject to Subpart D, and incorporates the exemptions in Section 9.5(e) of the Act. Section 232.410(c) provides for an additional applicability threshold, beyond the threshold in 232.410(a).

Section 232.420 provides that the Agency will supply to all sources expected to be affected by this proposal an ITAC Source Report that contains all the data fields required by Subpart D. This report is designed to assist affected sources in complying with the requirements of Subpart D, although the information need not be submitted on this form. The ITAC Source Report form is similar to the form being utilized through SARA 313.

Section 232.421 requires that all emission reports submitted pursuant to Subpart D be certified, and specifies the criteria for a certifying individual, as well as the required certification.

Section 232.423 provides that the failure of an affected source to receive an ITAC Source Report from the Agency does not relieve a source from the obligation to file an emissions report.

Section 232.430(a) specifies the date by which a source must file an emissions report and lists the information required to be submitted. Section 232.430(b) lists which emissions of ITACs are considered to be de minimis and therefore not subject to reporting. Section 232.430(c) specifies the date for reporting for sources that become subject to this proposal after January 1, 1996. Section 232.430(d), (e), and (f) list when a source must submit a revised emissions report to the Agency.

Section 232.440 allows a source to use engineering estimates to determine emissions if the type of estimate is reasonable, is specified, is the best information available, and notes that this Subpart does not require monitoring or testing in connection with these emissions reports.

Section 232.450(a) provides that the Agency may request additional information, beyond that initially submitted or specified in Section 232.430. Section 232.450(b) specifies that a source must retain records upon which the data included in the emissions report is based

for a minimum period of three years, and must make these records available to the Agency upon request.

Section 232.460 requires a source to correct any errors in the data previously submitted within 60 days of discovering such error.

#### Subpart E: Listing and Delisting

Section 232.501 contains an explanation for the inclusion of the chemicals and compound listed as HAPs under Section 112(b) of the CAA and for the inclusion of the “Great Waters” program targeted compounds under Section 112(m) of the CAA, and exempts these new compounds from the listing requirements of Section 232.500.

#### Section 232.Appendix A List of Toxic Air Contaminants

Appendix A has been amended to add the HAPS and Great Waters TACs not previously listed, and to denote the compounds as either HAPs, Great Water TACs, or both. Furthermore, Appendix A has also been revised to correct typographical errors and errors in the Chemical Abstract Service (CAS) numbers for previously listed chemicals.

### ORDER

The Board hereby proposes the following regulations for First Notice pursuant to the IAPA. The Board directs the Clerk to cause publication of these regulations in the Illinois Register for first notice. (The text starts on the following page.)

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE B: AIR POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD  
SUBCHAPTER f: TOXIC AIR CONTAMINANTS

PART 232  
TOXIC AIR CONTAMINANTS

SUBPART A: GENERAL PROVISIONS

Section	
232.100	Introduction
232.110	Incorporations by Reference
232.120	Definitions <del>(Repealed)</del>
232.130	Applicability

SUBPART B: DETERMINATION OF A TOXIC AIR  
CONTAMINANT

Section	
232.200	Characteristics for Determining a Toxic Air Contaminant

SUBPART C: PROCEDURES FOR EVALUATING  
CHARACTERISTICS OF A TOXIC AIR CONTAMINANT

Section	
232.300	Purpose
232.310	Procedures for Determining the Toxicity Score
232.320	Carcinogen Classification

SUBPART D: SOURCE IDENTIFICATION REQUIREMENTS

Section	
<u>232.400</u>	<u>Purpose</u>
<u>232.410</u>	<u>Applicability</u>
<u>232.420</u>	<u>ITAC Source Report</u>
<u>232.421</u>	<u>Emissions Report Certification</u>
<u>232.423</u>	<u>Failure to Receive an ITAC Source Report</u>
<u>232.430</u>	<u>Emissions Report</u>
<u>232.440</u>	<u>Use of Available Data</u>
<u>232.450</u>	<u>Retention of Records</u>
<u>232.460</u>	<u>Reporting of Errors</u>

SUBPART E: LISTING AND DELISTING

Section  
232.500 Procedures for Listing and Delisting Toxic Air Contaminants

232.501 Listing of Federal Hazardous Air Pollutants, Great Lakes Commission Toxic Compounds and Great Waters Program Toxic Compounds

APPENDIX A: List of Toxic Air Contaminants  
 APPENDIX B: Additional Procedures for Calculating the Chronic Toxicity Score  
 APPENDIX C: Carcinogens (Categories A, B1, and B2) listed on the Integrated Risk Information System (IRIS) as of December 31, 1989 (United States Environmental Protection Agency, Office of Health and Environmental Assessment)

AUTHORITY: Implementing Section 9.5 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/9.5 and 27].

SOURCE: Adopted in R90-1 at 16 Ill. Reg. 16592, effective October 18, 1992; amended in R \_\_ - \_\_ at \_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ 199\_.

#### SUBPART A: GENERAL PROVISIONS

Section 232.120 Definitions (~~Repealed~~)

The definitions of 35 Ill. Adm. Code ~~201.102, 211.122 and 215.104~~, 201 and 211 apply to this Part, as well as the definitions contained in this Section. Where a definition contained in this Section is more specific than those found in 35 Ill. Adm. Code ~~201.102, 211.122 and 215.104~~ 201 and 211, it must take precedence in application of this Part.

"ACGIH" means the American Conference of Governmental Industrial Hygienists.

"Adverse health effect" means a health injury or disease that may be produced by exposure to a contaminant. This includes any decrement in the function of an organ or organ system or any subclinical organ lesion that is likely to lead to a decrement in an organ or organ system function.

"Commercial fuel" means:

- a) Any fuel offered for final sale for use in combustion processes;
- b) Any gaseous fuel generated as a by-product at a source for which the source has been issued an operating permit to use such fuel internally in combustion processes, including internal combustion engines; or

- c) Any waste derived fuel for which an operating permit has been issued and which represents no more than five percent (.05) by weight on a daily basis of total fuel used in combustion processes by a source.

"Critical gestation days" means the days during which the formation and differentiation of organs and organ systems occurs during embryonic development.

~~"Emits" or "Emission" or "Emitted" means any non-accidental release into the atmosphere from an emission source or air pollution control equipment, or fugitive emissions defined according to 35 Ill. Adm. Code 203.124.~~

"Fugitive emissions" is defined according to 35 Ill. Adm. Code 203.124.

"IARC" means the World Health Organization's International Agency for Research on Cancer.

"IRIS" means the USEPA's Integrated Risk Information System.

"Illinois Toxic Air Contaminant" (ITAC) means any toxic air contaminant listed pursuant to 35 Ill. Adm. Code 232, excluding, specifically: coke oven gas; any hazardous air pollutant (HAP) now or hereafter listed under Section 112(b) of the Clean Air Act (CAA), as amended; and any pollutant or contaminant listed as a compound of concern under the Great Waters Program under Section 112(m) of the CAA.

"ITAC Source Report" means the report that the Agency provides to the source that lists data fields for the information required in the emissions report for Subpart D of this Part, and contains the information, if any, that previously has been reported to the Agency for those data fields.

"LC50" means the concentration in the air of a contaminant that kills, or is estimated to kill, fifty percent (.50) of a population of laboratory animals where the exposure is brief (8 hours or less) and where the route of exposure is inhalation.

"LD50" means the dose of a contaminant that kills, or is estimated to kill, 50 percent of a population of laboratory animals where the route of exposure is ingestion.

"Lowest observed adverse effect level" means the lowest experimentally determined dose at which a statistically or biologically significant indication of the toxic effect of concern is observed.

"Manufacture" means, for the purposes of 35 Ill. Adm. Code Sections 232.400 through 232.460 of this Part, to produce, prepare, or compound a listed ITAC, and includes coincidental production of an ITAC (e.g., as a by-product or impurity) as a result of

the manufacture, processing or otherwise use or treatment of one or more chemical substances not an ITAC. An ITAC intentionally incorporated into a product is considered to be manufactured.

"NTP" means the United States' Department of Health and Human Services, Public Health Services' National Toxicological Program.

~~"New emission source" means an emission source or air pollution control equipment for which a construction permit is required by 35 Ill. Adm. Code 201 after (the effective date of these rules); or an emission source or air pollution control equipment for which an operating permit is required by 35 Ill. Adm. Code 201, where the owner or operator failed to apply for a construction permit and applies for the first operating permit.~~

"No observed effect" means the condition where no adverse health effect has been detected.

"Otherwise use" means, for the purposes of 35 Ill. Adm. Code Sections 232.400 through 232.460 of this Part, any activity involving a listed ITAC at a source that does not fall within the definitions of "manufacture" or "process."

"Process" means, for the purposes of 35 Ill. Adm. Code Sections 232.400 through 232.460 of this Part, the preparation of an ITAC after its manufacture for distribution in commerce in the same physical state as, or in a different form or physical state from, that in which it was received by the source, or preparation that produces a change in physical state or chemical form.

~~"Process unit" shall have the meaning set forth in 35 Ill. Adm. Code Section 211.5210.~~

"Toxic air contaminant" (TAC) means a contaminant identified pursuant to Section 232.200 or Section 232.501 of this Part and listed in Appendix A of this Part.

(Source: Amended at \_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ 199\_.)

#### SUBPART D: SOURCE IDENTIFICATION REQUIREMENTS

##### Section 232.400      Purpose

This Subpart establishes identification and reporting requirements for new and existing sources that emit Illinois Toxic Air Contaminants.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ 199\_.)

##### Section 232.410      Applicability

- a) This Subpart shall apply to any owner or operator of a source that manufactures, processes or imports 25,000 lbs or more of any individual ITAC in any calendar year or otherwise uses 10,000 lbs of any individual ITAC in any calendar year.
- b) This Subpart shall not apply to the following:
- 1) Retail dry cleaning operations;
  - 2) Retail and noncommercial storage and handling of motor fuels;
  - 3) Combustion processes, including internal combustion engines, using only commercial fuel; and
  - 4) Equipment and operations which are exempt from permitting requirements pursuant to 35 Ill. Adm. Code 201.146;
- c) If an ITAC is present in a mixture of chemicals at a source at a concentration below one percent (0.01) by weight, or one-tenth of one percent (.001) by weight in the case of an ITAC which is a carcinogen listed in Appendix C of this Part, an owner or operator subject to this Subpart is not required to consider the quantity of the ITAC in such mixture when determining whether an applicable threshold has been met under subsection (a) of this Section or in determining the amount of emissions to be reported under Section 232.430 of this Part.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.420      ITAC Source Report

- a) On or before April 1, 1997, the Agency shall provide to the owner or operator of a source subject to this Subpart the ITAC Source Report. The ITAC Source Report shall contain all data fields for the information required under this Subpart.
- b) The information on emissions provided by the owner or operator of a source in the emissions report shall be based on the best information available to the owner or operator and that is reflective of the operations of the source and its ITAC emissions.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.421      Emissions Report Certification

All emission reports filed pursuant to this Subpart shall contain the following certification statement: "All emissions data verified, modified or provided on behalf of the source named above represents the best available information and is true and accurate to the best of my knowledge." The certification statement shall be signed by an individual responsible for the accuracy of the emissions report and who will take legal responsibility for the information verified or reported therein. The certification statement shall be accompanied by the full name, title, actual signature, date of signature, and a telephone number of the individual signing the emissions report.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.423      Failure to Receive an ITAC Source Report

Failure to receive the ITAC Source Report from the Agency shall not relieve an owner or operator from the obligation to file a complete emissions report. Any owner or operator who does not receive the ITAC Source Report on or before April 1, 1997, may contact the Agency to request the ITAC Source Report.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.430      Emissions Report

- a) On or before July 1, 1997, the owner or operator of a source subject to this Subpart shall file an emissions report for the calendar year 1996 which shall include the following information:
- 1) Source identification information; and
  - 2) Identify by generic name and Chemical Abstract Service (CAS) number, the source's actual annual emissions of each ITAC expressed in tons per year (TPY), and the source's annual fugitive emissions of each ITAC, expressed in TPY, for each ITAC that exceeds the threshold for applicability as set forth in Section 232.410 of this Part. In determining the actual annual emissions of each ITAC, the source may exclude emissions of such ITAC from all emission units with de minimis emissions of ITACs.
- b) The following emissions of ITACs shall be considered to be de minimis and shall not be subject to reporting requirements under this Subpart:
- 1) Emissions of ITACs from an emission unit which, in the aggregate, are less than one-half (0.5) TPY;

- 2) Emissions from a process unit resulting from a process vent stream with ITAC concentrations that are always less than one-tenth of one percent (0.001) by weight on a daily basis, if such concentrations include any carcinogen listed in Appendix C of this Part;
  - 3) Emissions from a process unit resulting from a process vent stream with ITAC concentrations that are always less than one percent (0.01) by weight on a daily basis, if such concentrations do not include any carcinogen listed in Appendix C of this Part; or
  - 4) Fugitive emissions of ITACs from a process unit which, in the aggregate, are less than one-half (0.5) TPY.
- c) If a source becomes subject to this Subpart on or after January 1, 1996, the owner or operator of the source shall submit an emissions report to the Agency on or before July 1 of the year following the date the source becomes subject to this Subpart for the period from the date the source first becomes subject to this Subpart through the end of the calendar year before the year the first report from such source is due under this Subpart. Such emissions report shall contain all of the information listed in subsections (a)(1), (a)(2), and (a)(3) of this Section and any additional information requested by the Agency pursuant to Section 232.450 of this Part. Any such emissions report shall satisfy the requirements of Sections 232.410, 232.420, 232.421, 232.423, 232.430, 232.440, 232.450, and 232.460 of this Part.
- d) An owner or operator of a source subject to this Subpart shall submit to the Agency a revised, correct emissions report on or before July 1 of the year following the occurrence of any of the following:
- 1) If the source's actual annual emissions of any individual ITAC or any combination of ITACs required to be reported under this Subpart increases by more than one-half (0.50) TPY or one (1) TPY, respectively, from the sources' emissions of ITACs initially reported under this Subpart; or
  - 2) If the source emits an ITAC that exceeds the threshold for applicability as set forth in Section 232.410 of this Part which was not previously reported in the source's initial report of its emissions of ITACs or in any subsequent revised report of its emissions of ITACs required to be submitted pursuant to this subsection.
- e) Any revised emissions report required to be submitted under subsection (d) of this Section shall contain all of the information listed in subsection (a) of this Section and any additional information requested by the Agency pursuant to

Section 232.450 of this Part. Any revised emissions report shall satisfy the requirements of Sections 232.410, 232.420, 232.421, 232.423, 232.430 232.440, 232.250, and 232.450 of this Part.

- f) By July 1 of the calendar year following any modification or change to an emission unit requiring a revision to an existing permit or a new permit and which may result in an increase in emissions of a previously reported ITAC by ten percent (.10) or more, an owner or operator of a source subject to this Subpart shall submit to the Agency a revised emissions report which includes the information required under Section 232.430 of this Part.

(Source: Added at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.440 Use of Available Data

- a) In order to provide the information required under this Subpart, the owner or operator of a source may:
- 1) Use reasonable engineering estimates of total emissions of individual ITACs pursuant to an emissions determination method, if, in each case, the owner or operator of a source specifies the emissions determination method used to estimate total emissions and certifies that such data represents the best available information and is true and accurate to the best of his/her knowledge; or
  - 2) If available, monitoring or measuring data collected pursuant to other provisions of law or regulation.
- b) Nothing in this Subpart requires the monitoring or measurement of the quantities, concentrations, or frequency of emissions of any ITAC beyond any monitoring or measurement required under other provisions of law or regulation.

(Source: Added at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ 199\_.)

Section 232.450 Retention of Records/ Additional Information

- a) For purposes of modeling and conducting assessments of information submitted under this Subpart, the Agency may request supporting documentation or additional information for any emissions report submitted by a source, including:
- 1) An identification by generic name and Chemical Abstract Service (CAS) number the source's emissions of each ITAC by emission unit, with

maximum hourly emission rates in lbs/hr and actual annual emissions in TPY and the source's fugitive emissions of each ITAC in TPY;

- 2) Operating data, exhaust point information and, if applicable, control device information for each emission unit; and
  - 3) Copies of engineering estimate calculations, mass balance calculations, and any other information or documentation used by the owner or operator of a source in preparing an emissions report.
- b) All records and calculations upon which the data submitted in the emissions report are based must be retained by the source for a minimum of three (3) years following the filing of a complete report. The owner or operator of a source shall provide the requested information in a format acceptable to the Agency within 60 days after the receipt of the request.
- c) Nothing in this Section shall be interpreted to impose upon any source subject to this Subpart any additional monitoring which is not otherwise required by applicable rules or a permit condition.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

#### Section 232.460 Reporting of Errors

If, after submitting any emissions report required by this Subpart, the owner or operator of a source discovers any error in the data reported, the owner or operator shall notify the Agency of the error in writing and shall provide the Agency with the correct data. The notification and correction shall be conveyed to the Agency within sixty (60) days after the owner's or operator's discovery of the error. The corrected data shall be certified in accordance with Section 232.421 of this Part.

(Source: Added at \_\_\_\_ Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ 199\_.)

### SUBPART E: LISTING AND DELISTING

#### Section 232.501 Listing of Federal Hazardous Air Pollutants, Great Lakes Commission Toxic Compounds and Great Waters Program Toxic Compounds

Notwithstanding the provisions of Section 232.500 of this Part, all chemicals listed as "hazardous air pollutants" under Section 112(b) of the CAA, as amended in 1990 (42 U.S.C. 7412(b)), and all chemicals targeted as toxic compounds or chemicals by the Great Lakes Commission or under the United States Environmental Protection Agency's "Great Waters" Program which are not currently listed as toxic air contaminants under this Part, are hereby listed as toxic air contaminants under Appendix A of this Part. The listing of hazardous air

pollutants and other toxic compounds or chemicals as toxic air contaminants under this Section is without reference to the listing procedures of Section 232.500 of this Part.

(Source: Added at Ill. Reg. \_\_\_\_\_, effective \_\_\_\_, 199\_.)

Section 232.APPENDIX A List of Toxic Air Contaminants

Chemical Name	CAS Number
Acetaldehyde	75-07-0*
Acetamide	60-35-5*
Acetonitrile	75-05-8*
Acetophenone	98-86-2*
<u>2-Acetylaminofluorene</u>	<u>53-96-3*</u>
Acrolein	107-02-8*
Acrylamide	79-06-1*
Acrylic acid	79-10-7*
Acrylonitrile	107-13-1*
Aldrin	309-00-2**
Allyl chloride	107-05-1*
2-Aminoanthraquinone	117-79-3
4-Aminoazobenzene	60-09-3
o-Aminoazotoluene	93-56-3
4-Aminobiphenyl	92-67-1*
1-Amino-2-methylantraquinone	82-28-0
Amitrole	61-82-5
Aniline	62-53-3*
o-Anisidine	90-04-0*
o-Anisidine hydrochloride	134-29-2
Antimony	7440-36-0
Arsenic	7440-38-2
Asbestos ( <del>friable</del> )	1332-21-4*
Azobenzene	103-33-3
Benzo(a)anthracene	56-55-3
Benzene	71-43-2*
Benzidine	92-87-5*
Benzo(a)pyrene	50-32-8**
Benzo(b)fluoranthene [ <u>3,4-Benzofluoranthene</u> ]	205-99-2**
Benzo(j)fluoranthene	205-82-3
Benzo(k)fluoranthene [ <u>11,12-Benzofluoranthene</u> ]	207-08-9**
<u>1,12-Benzoperylene</u>	<u>191-24-2**</u>
Benzotrichloride	98-07-7*
Benzyl chloride	100-44-7*
Benzyl violet	1694-09-3

Beryllium	7440-41-7
Beryllium oxide	1304-56-9
Biphenyl	92-52-4*
<u>Bis(chloromethyl)ether</u>	<u>542-88-1*</u>
Boron trifluoride	7637-07-2
Bromoform	75-25-2*
<u>4-Bromophenyl phenyl ether</u>	<u>101-55-3**</u>
1,3-Butadiene	106-99-0*
Butyl benzyl phthalate	85-68-7
beta-Butyrolactone	3068-88-0
C.I. Basic Red 9 monohydrochloride	569-61-9
Cadmium	7440-43-9
Cadmium oxide	1306-19-0
<u>Calcium cyanamide</u>	<u>156-62-7*</u>
Caprolactam	105-60-2*
<u>Captan</u>	<u>133-06-2*</u>
Carbaryl	63-25-2*
Carbofuran	1563-66-2
Carbon black	1333-86-4
Carbon disulfide	75-15-0*
Carbon tetrachloride	56-23-5*
<u>Carbonyl sulfide</u>	<u>463-58-1*</u>
Carbosulfan	55285-14-8
<u>Catechol</u>	<u>120-80-9*</u>
Chloramben	133-90-4*
Chlordane	57-74-9††
Chlorinated dibenzodioxins	--
Chlorinated dibenzofurans	--
Chlorendic acid	115-28-6
Alpha-Chlorinated toluenes	--
Chlorinated paraffins ([C12, 60% chlorine])	108171-26-2
Chlorine	7782-50-5*
Chloroacetic acid	79-11-18*
<u>2-Chloroacetophenone</u>	<u>532-27-4*</u>
Chlorobenzene	108-90-7*
<u>Chlorobenzilate</u>	<u>510-15-6*</u>
Chloroform	67-66-3*
Chloromethyl methyl ether	107-30-2*
<u>34-Chloro-2-methylpropene</u>	<u>563-47-3</u>
4-Chloro-o-phenylenediamine	95-83-0
p-Chloro-o-toluidine	95-69-2
<u>4-Chlorophenyl phenyl ether</u>	<u>7005-72-3**</u>
Chloroprene	126-99-8*
Chromium	7440-47-3

Chromium (VI)	18540-29-9
Chrysene	218-01-9
Coal tar (pitch) volatiles	65996-93-2
Cobalt	7440-48-4
Coke Oven Emissions	--
Copper	7440-50-8
p-Cresidine	120-71-8
Creosote (Coal)	8001-58-9
Cresol (mixed isomers) [ <u>Cresols/Cresylic acid</u> <u>(isomers and mixture)</u> ]	<u>1319-77-3*</u>
<u>o-Cresol</u>	<u>95-48-7*</u>
<u>m-Cresol</u>	<u>108-39-4*</u>
<u>p-Cresol</u>	<u>106-44-5*</u>
<u>Cumene</u>	<u>98-82-8*</u>
Cyanazine	21725-46-2
Cyclohexanone	108-94-1
DDD	72-54-8
<u>DDE</u>	<u>3547-04-4*</u>
<u>4,4'-DDE</u>	<u>72-55-9**</u>
<u>DDT</u>	<u>50-29-3**</u>
<u>Di-n-octyl phthalate</u>	<u>117-84-0**</u>
2,4-Diaminoanisole	615-05-4
2,4-Diaminoanisole sulfate	39156-41-7
4,4'-Diaminodiphenyl ether	101-80-4
2,4-Diaminotoluene	95-80-7*
<u>Diazomethane</u>	<u>334-88-3*</u>
Dibenzo(a,h)acridine	226-36-8
Dibenzo(a,j)acridine	224-42-0
Dibenzo(a,h)anthracene [ <u>1,2:5.6-Dibenzanthracene</u> ]	<u>53-70-3**</u>
Dibenzo(a,e)pyrene	192-65-4
Dibenzo(a,h)pyrene	189-64-0
Dibenzo(a,i)pyrene	189-55-9
Dibenzo(a,l)pyrene	191-30-0
<u>Dibenzofurans</u>	<u>132-64-9*</u>
Dibutyl phthalate	84-74-2††
1,2-Dibromo-3-chloropropane	96-12-8*
1,2-Dibromoethane [Ethylene dibromide]	106-93-4*
<u>1,4-Dichlorobenzene(p-)</u>	<u>106-46-7*</u>
3,3'-Dichlorobenzidine	91-94-1*
3,3'-Dichlorobenzidine dihydrochloride	612-83-9
Dichloroethyl ether [ <u>Bis(2-chloroethyl)ether</u> ]	111-44-4*
2,4-Dichlorophenoxyacetic acid [ <u>2,4-D,salts and esters</u> ]	94-75-7*
1,2-Dichloropropane [ <u>Propylene dichloride</u> ]	<u>78-87-5*</u>

1,3-Dichloropropylene [ <u>1,3-Dichloropropene</u> ]	542-75-6*
Dichlorvos	62-73-7*
Dieldrin	60-57-1**
Diepoxybutane	1464-53-5
<u>Diethanolamine</u>	111-42-2*
<u>N,N-Diethyl aniline [N,N-Dimethylaniline]</u>	121-69-7*
1,2-Diethylhydrazine	1615-80-1
Di(2-ethylhexyl) <u>pPhthalate [Bis(2-ethylhexyl) phthalate (DEHP)]</u>	117-81-7*
Diethyl sulfate	64-67-5*
Diglycidyl resorcinol ether	101-90-6
3,3'-Dimethoxybenzidine [ <u>Dianisidine</u> ]	119-90-4*
Dimethyl acetamide	127-19-5
<u>Dimethyl phthalate</u>	131-11-3*
4-Dimethyl aminoazobenzene [ <u>Dimethyl aminoazobenzene</u> ]	60-11-7*
3,3'-Dimethyl benzidine [o-Tolidine]	119-93-7*
Dimethyl carbamoyl chloride	79-44-7*
<u>N,N-Dimethyl formamide</u>	68-12-2*
1,1-Dimethyl hydrazine	57-14-7*
1,2-Dimethyl hydrazine	540-73-8
Dimethyl sulfate	77-78-1*
Dinitrocresol [ <u>4,6-Dinitro-o-cresol, and salts</u> ]	534-52-1*
2,4-Dinitrophenol	51-28-5*
2,4-Dinitrotoluene	121-14-2*
1,4-Dioxane [ <u>1,4-Diethyleneoxide</u> ]	123-91-1*
1,2-Diphenylhydrazine	122-66-7*
Disulfoton	298-04-4
Endothall	145-73-3
<u>Endrin</u>	72-20-8††
Epichlorohydrin	106-89-8*
<u>1,2-Epoxybutane</u>	106-88-7*
2-Ethoxyethanol	110-80-5
Ethyl acrylate	140-88-5*
<u>Ethyl benzene</u>	100-41-4*
<u>Ethyl chloride [Chloroethane]</u>	75-00-3*
Ethylene dichloride [ <u>1,2-Dichloroethane</u> ]	107-06-2*
<u>Ethylene glycol</u>	107-21-1*
<u>Ethylene imine [Aziridine]</u>	151-56-4*
Ethylene oxide	75-21-8*
Ethylene thiourea	96-45-7*
<u>Ethylidene dichloride [1,1-Dichloroethane]</u>	75-34-3*
Etridiazole	2593-15-9
FMC-67825	95465-99-9

Fluorine	7782-41-4
Folpet	133-07-3
Formaldehyde	50-00-0*
Furmecyclox	60568-05-0
Heptachlor	76-44-8††
Heptachlor epoxide	1024-57-3**
Hexachlorobenzene	118-74-1††
Hexachloro-1,3-butadiene [ <u>Hexachlorobutadiene</u> ]	87-68-3††
Hexachlorocyclopentadiene	77-47-4*
Hexachlorodibenzo-p-dioxin	19408-74-3
Hexachloroethane	67-72-1*
<u>Hexamethylene-1,6-diisocyanate</u>	822-06-0*
Hexamethylphosphoramide	680-31-9*
<u>Hexane</u>	110-54-3*
Hydrazine	302-01-2*
Hydrazine sulfate	10034-93-2
<u>Hydrochloric acid</u>	7647-01-0*
Hydrogen cyanide	74-90-8
<u>Hydrogen fluoride [Hydrofluoric acid]</u>	7664-39-3*
<u>Hydrogen sulfide</u>	7783-06-4*
<u>Hydroquinone</u>	123-31-9*
Indeno(1,2,3-cd)pyrene	193-39-5**
<u>Isophorone</u>	78-59-1*
Isophorone diisocyanate	4098-71-9
Lead	7439-92-1
Lindane-[Hexachlorocyclohexane-alpha](alpha)	319-84-6**
Lindane-[Hexachlorocyclohexane-beta](beta)	319-85-7**
Lindane-[Hexachlorocyclohexane-gamma](gamma)	
<u>[Lindane all isomers]</u>	58-89-9††
Lindane-[Hexachlorocyclohexane-mixed isomers]	
———(mixed isomers)	608-73-1
Linuron	330-55-2
Malathion	121-75-5
<u>Maleic anhydride</u>	108-31-6*
Manganese	7439-96-5
Mercury	7439-97-6**
<u>Methanol</u>	67-56-1*
<u>Methoxychlor</u>	72-43-5††
2-Methoxyethanol	109-86-4
2-Methoxyethanol acetate	110-49-6
<u>Methyl bromide [Bromomethane]</u>	74-83-9*
<u>Methyl chloride [Chloromethane]</u>	74-87-3*
<u>Methyl chloroform [(1,1,1-Trichloroethane)]</u>	71-55-6*
<u>Methyl ethyl ketone [2-Butanone]</u>	78-93-3*

<u>Methyl isobutyl ketone [Hexone]</u>	<u>108-10-1*</u>
<u>Methyl isocyanate</u>	<u>624-83-9*</u>
<u>Methyl methacrylate</u>	<u>80-62-6*</u>
<u>Methyl tert butyl ether</u>	<u>1634-04-4*</u>
5-Methylchrysene	3697-24-3
4,4'-Methylene bis(2-chloroaniline)	101-14-4*
Methylenebis(phenylisocyanate) [ <u>Methylene</u> <u>diphenyl diisocyanate (MDI)</u> ]	101-68-8
4,4'-Methylenebis(N,N'-dimethyl)benzenamine)	101-61-1
Methylene chloride [ <u>Dichloromethane</u> ]	75-09-2*
4,4'-Methylenedianiline	101-77-9*
4,4'-Methylenedianiline dihydrochloride	13552-44-8
Methyl hydrazine	60-34-4*
Methyl iodide [ <u>Iodomethane</u> ]	74-88-4*
Methyl mercaptan	74-93-1
N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7
Metolachlor	51218-45-2
Michler's Ketone	90-94-8
Mirex	2385-85-5**
Monoethanolamine	141-43-5
<u>Naphthalene</u>	<u>91-20-3*</u>
beta-Naphthylamide	91-59-8
Nickel	7440-02-0
Nitric acid	7697-37-2
Nitrilotriacetic acid	139-13-9
Nitrobenzene	98-95-3*
<u>4-Nitrobiphenyl</u>	<u>92-93-3*</u>
<u>5-Nitro-o-anisidine</u>	<u>99-59-2</u>
2-Nitropropane	79-46-9*
<u>4-Nitrophenol</u>	<u>100-02-7*</u>
N-Nitroso-n-butyl-N-(3-carboxypropyl) amine	38252-74-3
N-Nitroso-n-butyl-N-(4-hydroxybutyl) amine	3817-11-6
N-Nitrosodi-n-butylamine	924-16-3
N-Nitrosodiethanolamine	1116-54-7
N-Nitrosodiethylamine	55-18-5
N-Nitrosodimethylamine	62-75-9*
N-Nitrosodiphenylamine	86-30-6
N-Nitrosodi-n-propylamine	621-64-7
N-Nitroso-N-ethylurea	759-73-9
3-(N-Nitrosomethylamino) propionitrile	60153-49-3
N-Nitrosomethylethylamine	10595-95-6
N-Nitroso-N-methylurea	684-93-5*
N-Nitrosomethylvinylamine	4549-40-0
N-Nitrosomorpholine	59-89-2*

N-Nitrosornicotine	16543-55-8
N-Nitrosopiperidine	100-75-4
N-Nitrosopyrrolidine	930-55-2
N-Nitrososarcosine	13256-22-9
Nitrofen	11836-75-5
<u>Octachlorostyrene</u>	<u>2908-74-4**</u>
<u>PCDDs (Total polychlorinated dibenzodioxins)</u>	--
<u>PCDFs (Total polychlorinated dibenzofurans)</u>	--
<u>PAHs (Total polycyclic aromatic hydrocarbons)</u>	--
<u>Parathion</u>	<u>56-38-2*</u>
<u>Pentachlorobenzene</u>	<u>608-93-5††</u>
<u>Pentachloronitrobenzene [Quintobenzene]</u>	<u>82-68-8*</u>
Pentachlorophenol	87-86-5*
Peracetic acid	79-21-0
Phenol	108-95-2††
<u>p-Phenylenediamine</u>	<u>106-50-3*</u>
<u>Phenylhydrazine</u>	<u>100-63-0</u>
Phorate	298-02-2
<u>Phosgene</u>	<u>75-44-5*</u>
<u>Phosphine</u>	<u>7803-51-2*</u>
Phosphorus	7723-14-0*
Phosphorus oxychloride	10025-87-3
Phosphorus pentachloride	10026-13-8
<u>Photomirex</u>	<u>39801-14-4**</u>
<u>Phthalic anhydride</u>	<u>85-44-9*</u>
Polybrominated biphenyls	--
Polychlorinated biphenyls [ <u>Aroclors</u> ]	1336-36-3††
Potassium bromate	7758-01-2
Propane sultone [ <u>1,3-Propane sultone</u> ]	<u>1120-71-4*</u>
beta-Propiolactone	57-57-8*
<u>Propionaldehyde</u>	<u>123-38-6*</u>
<u>Propoxur [Baygon]</u>	<u>114-26-1*</u>
<u>Propyleneimine [1,2-Propylenimine(2-Methyl aziridine)]</u>	<u>75-55-8*</u>
Propylene oxide	75-56-9*
Pyrene	129-00-0
Quinoline	92-22-5*
<u>Quinone</u>	<u>106-51-4*</u>
Selenium	7782-49-2
Sodium borate	1303-96-4
<u>Styrene</u>	<u>100-42-5</u>
<u>Styrene</u>	<u>100-42-5*</u>
Styrene oxide	96-09-3*
Sulfallate	95-06-7

Sulfuric acid	7664-93-9
Terbufos	13071-79-9
<u>1,2,3,4-Tetrachlorobenzene</u>	<u>634-66-2††</u>
<u>1,2,4,5-Tetrachlorobenzene</u>	<u>95-94-3††</u>
1,1,2,2-Tetrachloroethane	79-34-35*
Tetrachloroethylene [Perchloroethylene]	127-18-4*
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6††
4,4'-Thiodianiline	139-65-1
Thiophenol	108-98-5
Thiourea	62-56-6
Thorium dioxide	1314-20-1
<u>Titanium tetrachloride</u>	<u>7550-45-0*</u>
Toluene	108-88-3††
Toluene-2,4-diisocyanate [2,4-Toluene diisocyanate]	584-84-9*
Toluene-2,6-diisocyanate	91-08-7
o-Toluidine	95-53-4*
o-Toluidine hydrochloride	636-21-5
p-Toluidine	106-49-0
Toxaphene	8001-35-2††
1,2,4-Trichlorobenzene	120-82-1*
<u>1,1,2-Trichloroethane</u>	<u>79-00-5*</u>
Trichloroethylene	79-01-6*
<u>2,4,5-Trichlorophenol</u>	<u>95-95-4*</u>
2,4,6-Trichlorophenol	88-06-2*
<u>Triethylamine</u>	<u>121-44-8*</u>
<u>Trifluralin</u>	<u>1582-09-8*</u>
Trimethylbenzene	25551-13-7
1,2,4-Trimethyl benzene	95-63-6
2,4,6-Trinitrotoluene	118-96-7
<u>2,2,4-Trimethylpentane</u>	<u>540-84-1*</u>
Tris(2,3-dibromopropyl) phosphate	126-72-7
Trypan blue	72-57-1
Urethane [Ethyl carbamate]	51-79-6*
<u>Vinyl acetate</u>	<u>108-05-4*</u>
Vinyl bromide	593-60-2*
Vinyl chloride	75-01-4*
Vinylidene chloride [1,1-Dichloroethylene]	75-35-4*
<u>Xylenes (isomers and mixture)</u>	<u>1330-20-7*</u>
<u>o-Xylenes</u>	<u>95-47-6*</u>
<u>m-Xylenes</u>	<u>108-38-3*</u>
<u>p-Xylenes</u>	<u>106-42-3*</u>

Antimony compounds*	--
Includes any unique chemical substance that contains antimony as part of that chemical's infrastructure	
Arsenic compounds*	--
Includes any unique chemical substance that contains arsenic as part of that chemical's infrastructure	
Beryllium compounds*	--
Includes any unique chemical substance that contains beryllium as part of that chemical's infrastructure	
Cadmium compounds*	--
Includes any unique chemical substance that contains cadmium as part of that chemical's infrastructure	
Chromium compounds*	--
Includes any unique chemical substance that contains chromium as part of that chemical's infrastructure	
Cobalt compounds*	--
Includes any unique chemical substance that contains cobalt as part of that chemical's infrastructure	
Cyanide compounds*	--
x(pos) CN(neg) where X = H(pos) or any other group where a formal dissociation can be made. For example, KCN or Ca(CN) <sub>2</sub>	
<u>Glycol ethers*</u>	--
<u>Includes any unique chemical substance that contains glycol as part of that chemical's infrastructure. Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol</u>	
<u>R(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR' where</u>	
<u>n = 1,2, or 3</u>	
<u>R = alkyl or aryl groups</u>	

R' = R, H, or groups which, when removed, yield glycol ethers with the structure:  $R(OCH_2CH_2)_n-OH$ .

Polymers are excluded from the glycol category.

<u>Fine mineral fibers*</u>	--
<u>Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) having the average diameter of 1 micrometer or less.</u>	
<u>Lead compounds*</u>	--
Includes any unique chemical substance that contains lead as part of that chemical's infrastructure	
<u>Manganese compounds*</u>	--
Includes any unique chemical substance that contains manganese as part of that chemical's infrastructure	
<u>Mercury compounds*</u>	--
Includes any unique chemical substance that contains mercury as part of that chemical's infrastructure	
<u>Nickel compounds*</u>	--
Includes any unique chemical substance that contains nickel as part of that chemical's infrastructure	
<u>Polycyclic Organic Matter (POM)*</u>	--
<u>Includes organic compounds having more than one benzene ring and a boiling point equal to or greater than 100 degrees Celsius (212 degrees Fahrenheit).</u>	
<u>Radionuclides (including radon)*</u>	--
<u>A type of atom which spontaneously undergoes radioactive decay.</u>	
<u>Selenium Compounds*</u>	--

Includes any unique chemical substance that contains selenium as part of that chemical's infrastructure.

\* Indicates presence on HAP List.

\*\*Indicates presence on Great Waters List.

††Indicates presence on HAP and Great Waters Lists.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1994)) provides for the appeal of final Board orders within 35 days of the date of service of this order. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246 "Motions for Reconsideration.")

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the \_\_\_\_\_ day of \_\_\_\_\_, 1996, by a vote of \_\_\_\_\_.

\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board