COUNTY NOTICES PURSUANT TO A.R.S. § 49-112

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NOTICE OF FINAL RULEMAKING

PIMA COUNTY CODE
TITLE 17. AIR QUALITY CONTROL

CHAPTER 4. GENERAL PROVISIONS

CHAPTER 12. PERMIT AND PERMIT REVISIONS

CHAPTER 16. EMISSION LIMITING STANDARDS

[M07-450]

PREAMBLE

1. Sections Affected — **Rulemaking Action**

PCC 17.04.340	Amend
PCC 17.12.140	Amend
PCC 17.12.160	Amend
PCC 17.12.165	Amend
PCC 17.12.190	Amend
PCC 17.12.230	Amend
PCC 17.12.235	Amend
PCC 17.12.340	Amend
PCC 17.12.350	Amend
PCC 17.16.590	Amend
PCC 17.16.645	Repeal
PCC 17.16.650	Repeal
PCC 17.16.650	Renumber
PCC 17.16.650	Amend
PCC 17.16.655	New Section
PCC 17.16.660	Repeal
PCC 17.16.660	Renumber
PCC 17.16.660	Amend
PCC 17.16.665	New Section
PCC 17.16.670	Repeal
PCC 17.16.670	New Section
PCC 17.16.675	New Section
PCC 17.16.680	Repeal
PCC 17.16.680	New Section
PCC 17.16.685	New Section
PCC 17.16.690	Repeal
PCC 17.16.700	Repeal

2. The Statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing Statutes: A.R.S. §§ 49-402, 49-479, and 11-251.08

Implementing Statutes: A.R.S. §§ 49-480.04, 49-112, and 11-251.08

3. The effective date of the rules:

August 23, 2007 or upon the final resolution of the litigation including, the resolution of all appeals in *Oak Canyon Manufacturing, Inc. vs. Arizona Department of Environmental Quality,* Maricopa County Superior Court case number CV2006-018439, whichever occurs later.

4. List of all previous notices appearing in the *Register* addressing the final rule.

Notice of Expedited Rulemaking: 13 A.A.R. 875, March 16, 2007

Notice of Public Meeting: 13 A.A.R. 1281, April 6, 2007

Notice of Public Information: 13 A.A.R. 1813 May 25, 2007

Notice of Public Information: 13 A.A.R. 2176, June 22, 2007

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Stacey Smith

Address: Pima County DEQ
33 N. Stone, Suite 730
Tucson, AZ 85701

Telephone: (520) 243-7322

Fax: (520) 243-7340

E-mail: Stacey.smith@deq.pima.gov

6. An explanation of the rule, including the Control Officer's reasons for initiating the rule:

Summary
This rulemaking contains amendments to Pima County Code Title 17 that conform to directly reflect the state rule for hazardous air pollutants.

Authority
Pursuant to ARS § 49-480.04, the Board of Supervisors shall establish by rule a county hazardous air pollutants program within six months of a program adopted by the Arizona Department of Environmental Quality adopted pursuant to ARS § 49-426.06.

Background
On June 9, 2006, the Arizona Department of Environmental Quality (ADEQ) published a Notice of Final Rulemaking for a state program that controls Hazardous Air Pollutants (HAPs). The effective date of the state HAPs program is January 1, 2007. Pursuant to ARS § 49-480.04, Pima County must adopt a county program that is no less stringent than the state program for HAPs. Pima County is proposing to adopt a program that is substantially identical to the HAPs program adopted by ADEQ.

Section	Action	Section by Section Analysis
PCC 17.04.340	Amend	Conform to A.A.C. R18-2-101, Definitions
PCC 17.12.140	Amend	Conform to A.A.C. R18-2-302, Applicability; Classes of Permits
PCC 17.12.160	Amend	Conform to A.A.C. R18-2-304, Permit Application Processing Procedures
PCC 17.12.165	Amend	Conform to A.A.C. R18-2-304, Permit Application Processing Procedures
PCC 17.12.190	Amend	Conform to A.A.C.R18-2-306, Permits Containing Voluntarily Accepted Emission Limitations and Standards
PCC 17.12.230	Amend	Conform to A.A.C. R18-2-317, Facility Changes Allowed Without Permit Revisions – Class I
PCC 17.12.235	Amend	Conform to A.A.C. R18-2-317, Facility Changes Allowed Without Permit Revisions – Class I
PCC 17.12.340	Amend	Conform to A.A.C. R18-2-330, Public Participation
PCC 17.12.350	Amend	Conform to A.A.C. R18-2-331, Material Permit Conditions
PCC 17.16.590	Amend	Conform to A.A.C. R18-2-406, Permit Requirements for Sources Located in Attainment and Unclassifiable Areas
PCC 17.16.645	Repealed	Repealed Provision relating to effective date for emissions of hazardous air pollutants
PCC 17.16.650	Amend	Conform to A.A.C. R18-2-1701, Definitions
PCC 17.16.655	Added	Conform to A.A.C. R18-2-1702, Applicability
PCC 17.16.660	Amend	Conform to A.A.C. R18-2-1703, State List of Hazardous Air Pollutants
PCC 17.16.665	Added	Conform to A.A.C. R18-2-1704, Notice of Types and Amounts of HAPs
PCC 17.16.670	New Section	Conform to A.A.C. R18-2-1705, Modifications; Permits; Permit Revisions
PCC 17.16.675	Added	Conform to A.A.C. R18-2-1706, Case-by-case HAPRACT Determination
PCC 17.16.680	New Section	Conform to A.A.C. R18-2-1707, Case-by-case AZMACT Determination

PCC 17.16.685	Added	Conform to A.A.C. R18-2-1708, Risk Management Analyses
PCC 17.16.690	Repealed	Conform to A.A.C. R18-2-1709, Periodic Review
PCC 17.16.700	Repealed	Repealed Provision relating to alternative emission limitations

7. A reference to any study relevant to the rule that the agency reviewed and wither relied on in its evaluation of or justification for the rule or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this rulemaking action.

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not Applicable

9. The summary of the economic, small business, and consumer impact:

This rulemaking amends Title 17 as required by A.R.S. § 49-480.04 to establish a county program for the control of hazardous air pollutants. This rulemaking is similar to and no more stringent than the Arizona Department of Environmental Quality's (ADEQ's) program for the regulation of HAPs. Sources subject to the Pima County HAPs Program may incur increased costs to comply with the regulations. It is probable the costs will increase for consumers of the products made by HAPs emitting industries. The HAPs program is intended to protect human health and the environment and improvements in air quality is expected to generate cost-savings by the general public avoiding adverse health impacts. The revisions to Title 17 should have no economic impact on Pima County businesses beyond that already incurred by reason of State law.

10. A description of the changes between the expedited rule, including supplemental notices, and final rules (if applicable):

Minor, non-substantive grammatical and typographical changes were made to the rule to improve clarity, conciseness, and understandability. New Section 17.16.690, Periodic Review, appearing in the Notice of Expedited Rulemaking has been removed. Pima County has no authority to review or revise the state list of HAPs or AACs. The county programs must be identical to the state under A.R.S. § 49-480.04.

11. A summary of the comments made regarding the rule and the agency response to them:

Comment: J. Stanton Curry, Gallagher & Kennedy P. A. Law Offices - Mr. Curry requested Pima County to defer any further action on Pima County's HAPs Rule until the Court determines whether the ADEQ HAPs Rule is invalid.

Response: Pima County DEQ response sent via letter: In consideration of the comment the Pima County HAPs Program has a delayed effective date until final resolution of the litigation including the resolution of all appeals in *Oak Canyon Manufacturing, Inc. vs. Arizona Department of Environmental Quality,* Maricopa County Superior Court case number CV2006-018439.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

None

13. Incorporations by reference and their location in the rules:

New incorporations by reference (subparts or larger):

Incorporations by Reference	Location
40 CFR Part 51, Appendix W, July 1, 2004	17.16.590(A)(6)(a)
40 CFR Part 63.2, July 1, 2004	17.16.650(3)
A.A.C., Title 18, Chapter 2, Appendix 1	17.16.670(F)
A.A.C., Title 18, Chapter 2, Appendix 12	17.16.685(C)(2) and (3)

14. Were these rules previously made as emergency rules?

No

15. The full text of the rule follows:

TITLE 17 OF THE PIMA COUNTY CODE
AIR QUALITY CONTROL

CHAPTER 17.04 GENERAL PROVISIONS

Article IX. Definitions and Meanings

17.04.340 Words, phrases, and terms.

CHAPTER 17.12 PERMITS AND PERMIT REVISIONS
Article II. Individual Source Permits.

17.12.140 Applicability-classes of permits.
17.12.160 Permit application processing procedures for Class I permits.
17.12.165 Permit application processing procedures for Class II and Class III permits.
17.12.190 Permits containing ~~voluntarily accepted~~ synthetic emission limitations and standards.
17.12.230 Facility changes allowed without permit revisions – Class I.
17.12.235 Facility changes allowed without permit revisions – Class II.
17.12.340 Public participation.
17.12.350 Material permit condition.

CHAPTER 17.16 EMISSION LIMITING STANDARDS
Article VIII. New Major Sources and Major Modifications to Existing Major Sources

17.16.590 Permit requirements for sources located in attainment and unclassifiable areas.

Article IX. Emissions of Hazardous Air Pollutants (HAPS).

17.16.645 Repealed.
17.16.650 Definitions.
17.16.655 Applicability.
17.16.660 ~~Federal~~ State list of hazardous air pollutants.
17.16.665 Notice of Types of Amounts of HAPs.
17.16.670 ~~Standards of performance for hazardous air pollutants.~~Modifications; Permits; Permit Revisions
17.16.675 Case-by-case HAPRACT Determination.
17.16.680 ~~Control of federal hazardous air pollutants.~~Case-by-case AZMACT Determination.
17.16.685 Risk Management Analyses.
17.16.690 Repealed.
17.16.700 Repealed.

CHAPTER 17.04 GENERAL PROVISIONS
Article IX. Definitions and Meanings

17.04.340 Words, phrases, and terms.

Words, phrases, and terms used in this Title shall have the following meanings except where any narrative portion specifically indicates otherwise:

A. Definitions.

….

193. "Regulated air pollutant" means any of the following:

….

d. Any hazardous air pollutant as defined in ~~A.R.S. § 49-401.01~~ Chapter 17.16, Article IX.

….

211. "Significant" means:

….

c. In reference to a regulated air pollutant that is not listed in subparagraph (a), is not a Class I or II substance listed in Section 602 of the Act and is not a hazardous air pollutant according to ~~A.R.S. § 49-401.01(11)~~ Chapter 17.16, Article IX, any emission rate.

….

CHAPTER 17.12 PERMITS AND PERMIT REVISIONS
Article II. Individual Source Permits.

17.12.140 Applicability; classes of permits.

B. There shall be three classes of permits as follows:

….

3. A Class III permit shall be required for a person to commence construction of or modify the following:

….

d. A person to begin actual construction of a source subject to Article IX of this Chapter.
e. A person to make a modification subject to Article IX of this Chapter to a source for which a permit has not been issued under this Article.

….

17.12.160 Permit application processing procedures for Class I permits.

….

D. Unless otherwise required by Section 17.12.150, a timely application is:

~~1. For a source, other than a major source, applying for a permit for the first time, one that is submitted within 12 months after the source becomes subject to the permit program.~~

~~2.~~1. For purposes of permit renewal, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of permit expiration.
~~3.~~2. For initial phase II acid rain permits … .
~~4.~~3. Any existing source which … .

….

F. A complete application is one that satisfies all of the following:

….

3. An application for a new permit or a permit revision shall contain an assessment of the applicability of the requirements established ~~pursuant to A.R.S. §§ 49-426.03 and 426.06~~ under Chapter 17.16 Article IX. If the applicant determines that the proposed new source permit or permit revision is subject to the requirements of ~~A.R.S. §§ 49-426.03 or 49-426.06~~ Chapter 17.16 Article IX, the application shall comply with all applicable requirements ~~promulgated under those sections~~ of that Article.

….

17.12.165 Permit application processing procedures for Class II and Class III permits.

….

E. A complete application is one that satisfies all of the following:

….

3. An application for a new permit or a permit revision shall contain an assessment of the applicability of the requirements established under Chapter 17.16 Article IX. If the applicant determines that the proposed new source permit or permit revision is subject to the requirements of Chapter 17.16 Article IX, the application shall comply with all applicable requirements of that Article
~~3.~~4. If a source wishes to voluntarily … .
~~4.~~5. If while processing an application that has been determined or deemed to be complete, the control officer determines that additional information is necessary to evaluate or take final action on that application, the Control Officer may request such information in writing, delivered by mail and set a reasonable deadline for a response. Except for minor permit revisions as set forth in ~~17.12.250~~ Section 17.12.255, a source's ability to operate without a permit, as set forth in this Article, shall be in effect … .
~~5.~~6. The completeness determination … .
~~6.~~7. If a permit applicant request … .
~~7.~~8. The Control Officer is not in disagreement … .

….

17.12.190 Permits containing ~~voluntarily accepted~~ synthetic emission limitations and standards.

….

17.12.230 Facility changes allowed without permit revisions – Class I.

A. A facility with a Class I permit may make changes without a permit revision if all of the following apply:
1. The changes are not modifications under any provision of Title I of the Act (Air Pollution Prevention and Control) or under A.R.S. ~~49-401.01(17)~~ § 49-401.01(24);

….

17.12.235 Facility changes allowed without permit revisions – Class II.

A. The following changes at a source with a Class II or Class III permit shall require a permit revision:
1. A change that triggers a new applicable requirement, ~~or~~ violates an existing applicable requirement, or is a modification under A.R.S. § 49-401.01(24).

….

17.12.340 Public participation.

A. The Control Officer shall provide public notice, an opportunity for public comment, and an opportunity for a hearing before taking the following actions:

….

5. Granting a variance from a general permit under Chapter 17.16 Article IX.

….

D. The notice required by subsection C shall include the following:

….

8. If applicable, that the source has submitted a risk management analysis ~~pursuant to A.R.S. 49-426.06~~ under Section 17.16.685;

….

17.12.350 Material permit condition.

A. For the purposes of A.R.S. §§ 49-464(G) and 49-514(G), a "material permit condition" shall mean a condition that satisfies all of the following:

….

3. The condition is one of the following:
a. An enforceable emission standard imposed to avoid classification as a major modification or major source or to avoid triggering any other applicable requirement,

b. A requirement to install, operate or maintain a maximum achievable control technology or hazardous air pollutant reasonably available control technology ~~required pursuant to the requirements of A.R.S. 49-426.06~~ under Chapter 17.16 Article IX,

….

CHAPTER 17.16 EMISSION LIMITING STANDARDS

Article VIII. New Major Sources and Major Modifications to Existing Major Sources.

17.16.590 Permit requirements for sources located in attainment and unclassifiable areas.

A. Except as provided in … the source or modification meets the following conditions:

….

6. Air Quality Models.
   a. All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data basis, and other requirements specified in ~~the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986), and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents~~ 40 CFR 51, Appendix W, "Guideline On Air Quality Models," as of July 1, 2004 (and no future amendments or editions), which shall be referred to hereinafter as "Guideline", and ~~are~~ is adopted by reference and is on file with the Secretary of State and with the Department.
   b. Where an air quality impact model specified … .

….

Article IX. Emissions of Hazardous Air Pollutants (HAPS).

17.16.645 Repealed.

17.16.650 Definitions.

~~For purposes of this article, the~~The following definitions and the definitions contained in Section 17.04.340 and A.R.S. § 49-401.01 ~~shall~~ apply to this Article unless a different meaning is clearly indicated by the context.

1. ~~"Area source" means any stationary source of federally listed hazardous air pollutants that is not a major source, but not including motor vehicles or non-road vehicles subject to regulation under Title II of the Act (National Emission Standards Act).~~"Acute adverse effects to human health" means those effects described in A.R.S. § 49-401.01(2) that are of short duration or rapid onset.
2. ~~"Existing source" means any stationary source other than a new source.~~"Acute Ambient Air Concentration (AAAC)" means that concentration of a hazardous air pollutant, in the ambient air, above which the general population, including susceptible populations, could experience acute adverse affects to human health.
3. ~~"Major source" means a stationary source, or a group of stationary sources that is located within a contiguous area that is under common control, and that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any federal hazardous air pollutant or 25 tons per year or more or 25 tons per year or more of any combination of federal hazardous air pollutants. A lesser quantity, or in the case of radionuclides different criteria, may be established by the Administrator pursuant to Section 112 of the Act (Hazardous Air Pollutants) and adopted by the Director by rule.~~ "Affected source" notwithstanding the definition at Section 17.04.340(12), in this Article, has the meaning of "affected source" contained in 40 CFR 63.2, as of July 1, 2004 (and no future amendments or editions), which is incorporated herein by reference, and is on file with the Department.
4. ~~"Maximum achievable control technology" (MACT) means an emission standard that requires the maximum degree of reduction in emissions of federal hazardous air pollutants, including a prohibition on such emissions where achievable, that the control officer, taking into considering the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable by a source to which such standard applies, through application of measures, processes, methods, systems or techniques, including measures which do one or more of the following:~~
   a. ~~Reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications.~~
   b. ~~Enclose systems or processes to eliminate emissions.c. Collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point.~~
   d. ~~Are design, equipment, work practice, or operational standards, including requirements for operator training or certification.~~
   e. ~~Are a combination of the above.~~"Ambient air concentration (AAC)" means that concentration of a hazardous air pollutant in the ambient air, listed in Section 17.16.685(C)(1) or determined according to Section 17.16.685(C)(2) or (C)(3), above which the general population, including susceptible populations, could experience adverse effects to human health.
5. ~~"Modification" or "modify" means a physical change in or change in the method of operation of a major source which increases the actual emissions of any federally listed air pollutant emitted by such source by more than a de minimis amount, or which results in the emission of any federally listed air pollutant not previously emitted by more than a de minimis amount.~~"Arizona maximum achievable control technology" or "AZMACT" means an emission standard that requires the maximum degree of reduction in emissions of the hazardous air pollutants subject to this Chapter, including a prohibition on the emissions where achievable and that the Control Officer,

according to Section 17.16.680 has determined to be an affected source to which the standard applies, through application of measures, processes, methods, systems or techniques including measures that:

a. Reduce the volume of, or eliminate emissions of, the pollutants through process changes, substitution of materials, or other modifications

b. Enclose systems or processes to eliminate emissions;

c. Collect, capture or treat the pollutants when released from a process, stack, storage or fugitive emissions point;

d. Are design, equipment, work practice, or operational standards, including requirements of operator training or certification; or

e. Are a combination of the above.

6. ~~"New source" means a stationary source, the construction or reconstruction of which commences after the Administrator first proposes regulations under Section 112 of the Act (Hazardous Air Pollutants) establishing an emission standard applicable to such source.~~"Chemical Abstract Service (CAS) Number" means a unique, identifying number assigned by the Chemical Abstract Service to each distinct chemical substance.
7. "Chronic adverse effects to human health" means those effects described in A.R.S. § 49-401.01(2) that are of a persistent, recurring, or long-term nature or that are delayed in onset.
8. "Chronic Ambient Air Concentration (CAAC)" means that concentration of a hazardous air pollutant, in the ambient air, above which the general population, including susceptible populations, could experience chronic adverse effects to human health.
9. "Federally listed hazardous air pollutants" means any air pollutant adopted under Section 17.16.660.
10. "Hazardous air pollutant" means any federally listed hazardous air pollutant.
11. "Major source of state hazardous air pollutants (HAPS)" means:
    a. A stationary source that emits or has the potential to emit in the aggregate, including fugitive emissions, ten tons per year or more of any state hazardous air pollutant or twenty-five tons per year or more of any combination of state hazardous air pollutants.
    b. Any change to a minor source of hazardous air pollutants that would increase its emissions to the qualifying levels in subsection (a).
12. "Minor source of state hazardous air pollutants (HAPs)" means a stationary source that emits or has the potential to emit, including fugitive emissions, one ton or more but less than 10 tons per year of any hazardous air pollutant or two and one-half tons or more but less than 25 tons per year of any combination of hazardous air pollutants.
13. "Modification" or "modify" means a physical change in, or change in the method of operation of a source that increases the actual emissions of any state hazardous air pollutant (HAP) emitted by the source by more than any de minimis amount listed in Table 1, or which results in the emission of any HAP not previously emitted by source by more than any de minimis amount listed in Table 1, including a change that increases a source's actual emissions of any state HAP that results in total source emissions that exceed 1 tpy of any individual HAP or 2.5 tpy of any combination of HAPs. A physical change in, or change in the method of operation of, a source is not a modification under this definition if:
    a. The change, together with any other changes implemented or planned by the source, qualifies for an alternative emission limitation under § 112(i)(5) of the Clean Air Act;
    b. The Clean Air Act § 112(d) or (f) imposes a standard requiring the change that is implemented after the Administrator promulgates the standard;
    c. The change is routine maintenance, repair, replacement;
    d. The change is the use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 – 825r;
    e. The change is the use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
    f. The change is the use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
    g. The change is an increase in the hours of operation or in the production rate, unless the change would be prohibited under an enforceable permit condition; or
    h. The change is any change in ownership at a stationary source.
14. "Potential to emit" or "potential emission rate" means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, taking into account controls that are enforceable under any federal, state, or local law, rule or regulation, or that are inherent in the design of the source.
15. "SIC Code" means the standard industrial classification code number for a source category derived from 1987 Standard Industrial Classification Manual (U.S. Office of Management and Budget, 1987).
16. "State hazardous air pollutant" (HAP) means any federally listed hazardous air pollutant.
17. "Technology transfer" means the process by which existing control technologies that have been successfully applied in one or more source categories that have similar processes or emissions units are reviewed for potential use in a different source category.

Table 1. State HAPs De Minimis Levels

Chemical	De Minimis (lb/hr)	De Minimis (lb/yr)
1,1,1 – Trichloroethane (Methyl Chloroform)	117	14,247
1,1,2,2 – Tetrachloroethane	N/A	0.20
1,3 – Butadiene	N/A	0.39
1,4 – Dichlorobenzene	N/A	1.9
2,2,4 – Trimethylpentane	51	N/A
2,4 – Dinitrotoluene	N/A	0.13
2 – Chloroacetophenone	N/A	0.19
Acetaldehyde	N/A	5.3
Acetophenone	1.4	2,261
Acrolein	0.013	0.129
Acrylonitrile	N/A	0.17
Antimony Compounds (Selected compound: Antimony)	0.71	9.0
Arsenic Compounds (Selected compound: Arsenic)	N/A	0.0027
Benzene	N/A	1.5
Benzyl Chloride	N/A	0.25
Beryllium Compounds (Selected compound: Beryllium)	0.000707	0.0049
Biphenyl	2.1	1,130
bis(2-Ethylhexyl) Phthalate	0.71	3.0
Bromoform	0.42	11
Cadmium Compounds (Selected compound: Cadmium)	N/A	0.0065
Carbon Disulfide	18	4,522
Carbon Tetrachloride	N/A	0.78
Carbonyl Sulfide	1.7	N/A
Chlorobenzene	57	6,442
Chloroform	N/A	2.2
Chromium Compounds (Selected compound: Hexavalent Chromium)	N/A	0.0010
Cobalt Compounds (Selected compound: Cobalt)	N/A	0.0042
Cumene	53	2,583
Cyanide Compounds (Selected compound: Hydrogen Cyanide)	0.22	19
Dibenzofurans	1.4	45
Dichloromethane (Methylene Chloride)	20	25
Dimethyl formamide	9.3	194
Dimethyl Sulfate	0.018	N/A
Ethyl Benzene	14	6,442

Ethyl Chloride (Chloroethane)	71	64,420
Ethylene Dibromide (Dibromoethane)	N/A	0.020
Ethylene glycol	2.8	2,583
Ethylidene Dichloride (1,1 – Dichloroethane)	354	3,230
Formaldehyde	N/A	0.90
Glycol Ethers (Selected compound: Diethylene glycol, monoethyl ether)	14	19
Hexachlorobenzene	N/A	0.026
Hexane	659	13,689
Hydrochloric Acid	0.93	129
Hydrogen Fluoride (Hydrofluoric Acid)	0.56	90
Isophorone	0.71	12,946
Manganese Compounds (Selected compound: Manganese)	0.14	0.32
Mercury Compounds (Selected compound: Elemental Mercury)	0.058	1.9
Methanol	53	25,830
Methyl Bromide	15	32
Methyl Chloride	67	582
Methyl Hydrazine	N/A	0.0024
Methyl Isobutyl Ketone (Hexone)	28	19,388
Methyl Methacrylate	18	4,522
Methyl Tert-Butyl Ether	N/A	46
N,N-Dimethylaniline	1.4	45
Naphthalene	N/A	0.35
Nickel Compounds (Selected compound: Nickel Refinery Dust)	N/A	0.049
Phenol	3.3	1,295
Polychlorinated Biphenyls (Selected Compound: Aroclor 1254)	N/A	0.12
Polycyclic Organic Matter (Selected compound: Benzo(a)pyrene)	N/A	0.013
Propionaldehyde	N/A	5.3
Propylene Dichloride	14	26
Selenium Compounds (Selected compound: Selenium)	0.028	113
Styrene	31	6,442
Tetrachloroethylene (Perchlorethylene)	N/A	2.0
Toluene	109	146,766
Trichloroethylene	N/A	0.10
Vinyl Acetate	22	1,295
Vinyl Chloride	N/A	1.3
Vinylidene Chloride (1,2-Dichloroethylene)	2.1	1,295

Xylene (Mixed Isomers)	98	644

17.16.655 Applicability

A. The provisions of this Article apply to:
   1. Minor sources of state hazardous air pollutants that are in one of the source categories listed in Table 2; and
   2. Major sources of state hazardous air pollutants.

B. The provisions of this Article shall not apply to:
   1. Affected sources for which a standard under 40 C.F.R. 61 or 40 CFR 63 imposes an emissions limitation.
   2. Affected sources at a minor source of state HAPs if the minor source:
      i. Is in a source category for which a standard under 40 CFR 63 has been adopted; and
      ii. Agrees to comply with the emissions limitation under Section 17.12.190.

C. If the Clean Air Act has established provisions including specific schedules for the regulation of source categories under Section 112(e)(5) and 112(n), those provisions and schedules shall apply to the regulation of those source categories.

D. For any category or subcategory of facilities licensed by the Nuclear Regulatory Commission, the Control Officer shall not adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation adopted by the Administrator under Section 112 of the Act.

E. The provisions of this Article shall not apply to sources for which the Administrator has made one of the following findings under Section 112(n) of the Clean Air Act, 42 U.S.C. 7412(n):
   1. A finding that regulation is not appropriate or necessary, or
   2. A finding that the source should apply alternative control strategies.

Table 2. State HAPs Minor Source Categories

Primary SIC Code	Source Category
2434	Wood Kitchen Cabinets
2451	Mobile Homes
2621	Paper Mills
2679	Converted Paper Products, n.e.c.[1]
2851	Paints and Allied Products
2911	Petroleum Refining
3086	Plastics Foam Products
3088	Plastics Plumbing Fixtures
3089	Plastics Products, n.e.c.[1]
3241	Cement, Hydraulic
3281	Cut Stone and Stone Products
3296	Mineral Wool
3312	Blast Furnaces and Steel mills
3331	Primary Copper
3411	Metal Cans
3444	Sheet Metal Work
3451	Screw Machine Products
3479	Metal Coating and Allied Services
3585	Refrigeration and Heating Equipment
3672	Printed Circuit Boards
3999	Mfg. Industries, n.e.c.[1]
4922	Natural Gas Transmission
5169	Chemicals and Allied Products, n.e.c[1]

5171	Petroleum Bulk Stations and Terminals

[1] Not Elsewhere Classified

17.16.660 ~~Federal~~ State list of hazardous air pollutants.

A. ~~All of the following are on the federal list of hazardous air pollutants~~ The following federally listed hazardous air pollutants listed in § 112(b)(1) of the Clean Air Act, 42 U.S.C. 7412(b)(1) are hazardous air pollutants under this Article:

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
~~105602~~	~~Caprolactam~~
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-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethylaniline (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-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
~~2~~75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopenta-diene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diiso-cyanate
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)
~~78933~~	~~Methyl ethyl ketone (2-Butanone)~~
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2-chloroaniline)
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 (Aroclors)
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-Tetrachlorodi-benzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (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
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]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine Mineral Fibers [3]
0	Nickel Compounds
0	Polycylic Organic Matter [4]
0	Radionuclides (including radon) [5]
0	Selenium Compounds

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

[2] Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R(OCH_2CH_2)_n$-OR' where:

i. n = 1, 2, or 3;

ii. R = alkyl C7 or less ~~or aryl groups~~;

iii. R = phenyl or alkyl substituted phenyl;

iv. R' = H or alkyl C7 or less; or ~~R, H, or groups which, when removed, yield glycol ethers with the structure: $R(OCH_2CH)_n$-OH. Polymers are excluded from the glycol category.~~

v. OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate

Glycol ethers does not include ethylene glycol monobutyl ether.

[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 more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

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

B. For all listings above which contain the word "compounds" and for glycol ethers, unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

17.16.665 Notice of types and amounts of HAPS.

An owner or operator of a source subject to this Article shall provide the Control Officer with notice, in a permit application, of the types and amounts of HAPs emitted by the source. The notice shall include readily available data regarding emissions from the source. The Control Officer shall not require the owner or operator to conduct performance tests, sampling, or monitoring to fulfill the requirements of this Section.

17.16.670 ~~Standards of performance for hazardous air pollutants.~~ Modifications; Permits; Permit Revisions

~~The federal standards of performance for hazardous air pollutants, National Emission Standards for Hazardous Air Pollutants (NESHAP), are listed in section 17.16.530.~~

A. Any person who constructs or modifies a source that is subject to Section 17.16.655 must first obtain a permit or significant permit revision that complies with Article II, of Chapter 17.12, and subsection (B) or (C).

B. A permit or significant permit revision that the Department issues to a new or modified source that is subject to this program under Section 17.16.655(A)(1) shall impose HAPRACT under Section 17.16.675, unless the applicant demonstrates, with a Risk Management Analysis under Section 17.16.685, that the imposition of HAPRACT is not necessary to avoid adverse effects to human health or adverse environmental effects.

C. A permit or significant permit revision that the Department issues to a new or modified source that is subject to this program under Section 17.16.655(A)(2) shall impose AZMACT under Section 17.16.680, unless the applicant demonstrates, with a Risk Management Analysis under Section 17.16.685, that the imposition of AZMACT is not necessary to avoid adverse effects to human health or adverse environmental effects.

D. If the Control Officer establishes a general permit establishing HAPRACT according to the Arizona Administrative Code Title 18, Article 5 of Chapter 2, the following apply:

1. The owner or operator of a source covered by that general permit may obtain a variance from HAPRACT by complying with Section 17.16.685 when the source applies for the general permit;

2. If the owner or operator makes applicable demonstration required by Section 17.16.685 and otherwise qualifies for the general permit, the Control Officer shall approve the application according to A.R.S. § 49-480.04 and issue an authorization-to-operate granting a variance from the specific provisions of the general permit relating to HAPRACT; and

3. Except as modified by a variance, the general permit governs the source.

E. When determining whether HAP emissions from a new source or modification exceed the thresholds prescribed by Section 17.16.650(11) or (12), or a de minimis amount described in Section 17.16.650 Table 1, the Control Officer shall exclude particulate matter emissions that consist of natural crustal material and that are produced either by natural forces, such as wind or erosion, or by anthropogenic activities, such as agricultural operations, excavation, blasting, drilling, handling storage, earth moving, crushing, grinding or traffic over unpaved roads, or other similar activities.

F. In addition to the requirements of Title 18, Chapter 2, Appendix 1 of the Arizona Administrative Code "Standard Permit Application Form and Filing Instructions," an application for a permit or permit revision required under this Section shall include one of the following:
1. The applicant's proposal and documentation for HAPRACT under Section 17.16.675;
2. The applicant's proposal and documentation for AZMACT under Section 17.16.680; or
3. A risk management analysis submitted under Section 17.16.685.

G. Any applicant for a permit or permit revision under this Article may request accelerated permit processing under Section 17.12.510(N).

17.16.675 Case-by-case HAPRACT determinations.

A. The applicant shall include in the application sufficient documentation to show that the proposed control technology or methodology meets the requirements of A.R.S. § 49-480.04 and this Section.

B. An applicant subject to Section 17.16.670(B) shall propose HAPRACT for the new source or modification, to be included in the applicant's permit or significant permit revision. The applicant shall document each of the following steps:
1. The applicant shall identify the range of applicable control technologies, including:
a. A survey of similar emission sources to determine the emission limitations currently achieved in practice in the United States;
b. Controls applied to similar source categories, emissions units, or gas streams through technology transfer; and
c. Innovative technologies that are demonstrated to be reliable, that reduce emissions for the HAP under review at least to the extent achieved by the control technology that would otherwise have been proposed and that meets all the requirements of A.R.S. § 49-480.04 and the Section.
2. The applicant shall propose as HAPRACT one of the control technologies identified under subsection (B)(1), and shall provide:
a. The rationale for selecting the specific control technologies from the range identified in subsection (B)(1);
b. Estimated control efficiency, described as percent HAP removed;
c. Expected emission rate in tons per year and pounds per hour;
d. Expected emission reduction in tons per year and pounds per hour;
e. Economic impacts and cost effectiveness of implementing the proposed control technology;
f. Other environmental impacts of the proposed control technology; and
g. Energy impacts of the proposed technology.
3. The applicant shall identify rejected control technologies identified in subsection (B)(1), and shall provide for each rejected control technology;
a. The rationale for rejecting the specific control technologies identified in subsection (B)(1);
b. Estimated control efficiency, described as percent HAP removed;
c. Expected emission rates in tons per year and pounds per hour;
d. Expected emission reduction in tons per year and pounds per hour;
e. Economic impacts and cost effectiveness of implementing the rejected control technologies;
f. Other environmental impacts of the rejected control technology; and
g. Energy impacts of the rejected control technologies.

C. The Control Officer shall determine whether the applicant's HAPRACT selection complies with A.R.S. § 49-480.04 and this Section, based on the documentation provided in subsection (B).
1. If the Control Officer finds that the applicant's proposal complies with A.R.S. § 49-480.04 and this Section, the Control Officer shall include the applicant's proposed HAPRACT selection in the permit or permit revision.
2. If the Control Officer finds that the applicant's proposal fails to comply with A.R.S. § 49-480.04 and this Section, the Control Officer shall:
a. Notify the applicant that the proposal fails to meet requirements;
b. Specify the deficiencies in the proposal; and
3. If the applicant does not submit a new proposal, the Control Officer shall deny the application for a permit or permit revision.
4. If the Control Officer finds that the new proposal fails to comply with A.R.S. § 49-480.04 and this Section, the Control Officer shall deny the application for a permit or permit revision.

D. If the Control Officer finds that a reliable method of measuring HAP emissions is not available, the Control Officer shall require, in the permit, the applicant to comply with a design, equipment, work practice or operational standard, or combination of these, but shall not impose a numeric emissions limitation upon the applicant.

E. The Control Officer shall not impose a control technology that would require the application of measures that are incompatible with measures required under Article VII or 40 CFR 63. An applicable control technology for a source

or source category that is promulgated by the Administrator shall supersede control technology imposed by the Control Officer for that source or source category.

17.16.680 ~~Control of federal hazardous air pollutants.~~ Case-by-case AZMACT Determination.

A. ~~A person shall not obtain a permit or permit revision to modify an existing major source of federal hazardous air pollutants, or to construct a new major source of federal hazardous air pollutants, unless the control officer determines that the person will install the maximum achievable control technology (MACT) for the modification or new major source. A physical change to a source or change in the method of operation of a source is not a modification if the change complies with requirements of section 112 (g) (1) of the Act (Hazardous Air Pollutants), which is incorporated by reference.~~ The applicant shall include in the application sufficient documentation to show that the proposed control technology meets the requirements of A.R.S. § 49-480.04 and this Section.

B. ~~Until the Administrator promulgates, and the control officer adopts, emissions standards establishing MACT for a source category, or subcategory that includes a source subject to subsection A of this Section, the control officer shall determine MACT for the modification or new major source on a case-by-case basis. If the control officer determines that it is not feasible to prescribe or enforce a numerical emission limitation, a MACT standard imposed pursuant to this subsection may consist of a design, equipment, work practice or operational standard, or a combination of these.~~ An applicant subject to Section 17.16.670(C) shall propose AZMACT for the new source or modification, to be included in the applicant's permit or permit revision. The applicant shall document each of the following steps:

1. The applicant shall identify all available control options, taking into consideration the measures cited in Section 17.16.650(4). The analysis shall include a survey of emission sources to determine the most stringent emission limitation currently achieved in practice in the United States, and may include controls applied through technology transfer to similar source categories and gas streams.
2. The applicant shall eliminate options that are technically infeasible because of source-specific factors. The applicant shall clearly document the demonstration of technical infeasibility, and shall base the demonstration upon physical, chemical and engineering barriers that would preclude the successful use of each control option that the applicant has eliminated.
3. The applicant shall list the remaining control technologies in order of overall removal efficiency for the HAP under review, with the most effective at the top of the list. The list shall include the following information, for the control technology proposed and for any control technology that is ranked higher than the proposed technology:
   a. Estimated control efficiency, described by percent of HAP removed;
   b. Expected emission rate in tons per year and pounds per hour;
   c. Expected emission reduction in tons per year and pounds per hour;
   d. Economic impacts and cost effectiveness;
   e. Other environmental impacts; and
   f. Energy impacts.
4. The applicant shall evaluate the most effective controls, listed according to subsection (B)(3), and document the results as follows:
   a. For new major sources, the applicant shall consider the factors described in subsection (B)(3) to arrive at the final control technology proposed as AZMACT.
      i. The applicant shall discuss the beneficial and adverse economic, environmental, and energy impacts and quantify them where possible, focusing on the direct impacts of each control technology.
      ii. If the applicant proposes the top alternative in the list as AZMACT, the applicant shall consider whether other environmental impacts mandate the selection of an alternative control technology. If the applicant does not propose the top alternative as AZMACT, the applicant shall evaluate the next most stringent technology in the list. The applicant shall continue the evaluation process until the applicant arrives at a technology that the applicant does not eliminate because of source-specific, economic, environmental or energy impacts.
   b. For a modification, the applicant shall evaluate the control technologies according to subsection (B)(4)(a). AZMACT for a modification may be less stringent than AZMACT for a new source in the same source category but shall not be less stringent than:
      i. In cases where the applicant has identified 30 or more sources, the average emission limitation achieved by the best performing 12% of the existing similar sources, which the applicant shall include in the permit application; or
      ii. In cases where the applicant has identified fewer than 30 similar sources, the average emission limitation achieved by the best performing five sources, which the applicant shall include in the permit application.
5. The applicant shall propose as AZMACT for the HAP under review:
   a. The most effective control technology or methodology not eliminated in the evaluation described in subsection (B)(4); or
   b. An innovative technology that reduces emissions to the extent achieved by the control technology that the applicant otherwise would have proposed under subsection (5)(a), and that meets all the requirements of A.R.S. § 40-426.06 and this Section.

C. ~~If the Administrator fails to adopt a standard for a source category or subcategory within eighteen (18) months after the deadline established for that category or subcategory pursuant to Section 112(e)(1) and (3) of the Act (Hazardous Air Pollutants), the owner or operator of an existing major source in that category or subcategory shall be required to~~

~~submit a permit application for such source, and the control officer shall be required to issue a permit or permit revision establishing MACT for the source on a case by case basis, or an alternative emission limitation pursuant to Section 17.16.700 or section 112 (h) (3) of the Act (Hazardous Air Pollutants). If the control officer determines that it is not feasible to prescribe or enforce a numerical emission limitation, a MACT standard imposed pursuant to this subsection may consist of a design, equipment, work practice or operational standard, or a combination of these.~~The Control Officer shall not approve a control technology or methodology less stringent than any applicable federal New Source Performance Standard (NSPS) at 40 CFR 60 or National Emission Standard for Hazardous Air Pollutants (NESHAP) at 40 CFR 61.

D. ~~When the Administrator adopts and makes effective standards pursuant to Section 112(d) or 112(f) of the Act (Hazardous Air Pollutants), the control officer shall adopt those standards as prescribed by the Administrator.~~The Control Officer shall determine whether the applicant's AZMACT proposal complies with A.R.S. § 49-480.04 and this Section.
   1. If the Control Officer determines that the applicant's proposal complies with A.R.S § 49-480.04 and this Section, the Control Officer shall include the applicant's proposed AZMACT selection in the permit or permit revision
   2. If the Control Officer determines that the applicant's proposal does not comply with A.R.S. § 49-480.04 and this Section, the Control Officer shall:
      a. Notify the applicant that the proposal does not meet the requirements;
      b. Specify the deficiencies; and
   3. If the applicant does not submit a new proposal, the Control Officer shall deny the application for a permit or permit revision.
   4. If the Control Officer determines that the new proposal fails to comply with A.R.S. § 49-480.04 and this Section, the Control Officer shall deny the application for a permit or permit revision.

E. ~~Where the Act has established provisions, including specific schedules, for the regulation of source categories pursuant to Section 112(e)(5) and 112(n) of the Act (Hazardous Air Pollutants), those provisions and schedules shall be adopted by the control officer.~~If a reliable method of measuring HAP emissions is not available, the Control Officer shall require the applicant to comply with a design, equipment, work practice or operational standard, or combination of these, to be included in the applicant's permit, but shall not impose a numeric emissions limitation.

F. ~~For any category or subcategory of facilities licensed by the U. S. Nuclear Regulatory Commission, the control officer shall not adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation adopted by the Administrator pursuant to Section 112 of the Act (Hazardous Air Pollutants).~~The Control Officer shall not impose a control technology that would require the application of measures that are incompatible with measures required under Article VII or 40 CFR 63. An applicable control technology for a source or source category that is promulgated by the Administrator shall supersede control technology imposed by the Control Officer for that source or source category.

~~G. When the Administrator makes one of the following findings pursuant to Section 112(n)(1)(a) of the Act (Hazardous Air Pollutants), the finding is effective for purposes of the State's administration and enforcement of the Federal hazardous air pollutant program in the same manner as prescribed by the Administrator, upon adoption by the Director of the following by rule:~~
   ~~1. A finding that regulation is not appropriate or necessary.~~
   ~~2. A finding that alternative control strategies should be applied.~~

17.16.685 Risk Management Analyses.

A. Applicability.
   1. An applicant seeking to demonstrate that HAPRACT or AZMACT is not necessary to prevent adverse effects to human health or the environment by conducting an RMA shall first apply for a permit or significant permit revision that complies with Article II of Chapter 17.12.
   2. An applicant seeking to demonstrate that HAPRACT or AZMACT is not necessary to prevent adverse effects to human health or the environment shall conduct a risk management analysis (RMA) according to this Section.
   3. The RMA for a new source shall apply to:
      i. The source's annual total potential to emit state HAPs for evaluation of chronic exposure; or
      ii. The source's hourly total potential to emit state HAPs for evaluation of acute exposure.
   4. The RMA for modified source shall apply to:
      i. The source's annual total potential to emit state HAPs, after the modification, for evaluation of chronic exposure; or
      ii. The source's hourly total potential to emit state HAPs, after the modification, for evaluation of acute exposure.
   5. An applicant shall conduct an RMA for each state HAP emitted by the source in greater than de minimis amounts.

B. The applicant may use any of the following methods for conducting an RMA:
   1. Tier 1: Equation.
      a. For emissions of a HAPs included in a listed group of hazardous compounds, other than those HAPs identified in Table 3 as selected compounds, the applicant shall determine a health-based ambient air concentration, under subsection (C)(3).
      b. The applicant shall determine the potential maximum hourly exposure resulting from emissions of the HAP by applying the following equation:

MHE = PPH * 17.68, where:
i. MHE = maximum hourly exposure in milligrams per cubic meter, and
ii. PPH = hourly potential to emit the HAP in pounds per hour.

c. The applicant shall determine the potential maximum annual exposure resulting from emissions of the HAP by applying the following equation:
MAE = PPY * 1/MOH * 1.41, where:
i. MAE=maximum annual exposure in milligrams per cubic meter,
ii. PPY=annual potential to emit the HAP in pounds per year, and
iii. MOH= maximum operating hours for the source, taking into account any enforceable operational limitations.

d. The Control Officer shall not require compliance with HAPRACT for the HAP, under Section 17.16.675, or AZMACT, under Section 17.16.680, if both of the following are true:
i. The maximum hourly concentration determined under subsection (B)(1)(b) is less than the AAAC determined under subsection (C)(3); and
ii. The maximum annual concentration determined under subsection (B)(1)(c) is less than the CAAC determined under subsection (C)(3).

e. If either the maximum hourly concentration determined under subsection (B)(1)(b), or the maximum annual concentration determined under subsection (B)(1)(c) is greater than or equal to the relevant AAC:
i. The Control Officer shall require compliance with HAPRACT under Section 17.16.675 or AZMACT under Section 17.16.680; or
ii. The applicant may use the Tier 2, Tier 3 or Tier 4 method for conducting an RMA under subsection (B)(2).

2. Tier 2: SCREEN Model. The applicant shall use the SCREEN Model, performed in a manner consistent with the Guideline specified in Section 17.16.590(A)(6)(a). The applicant shall compare the maximum concentration that is predicted in the ambient air with the relevant ambient air concentration determined under subsection (C).
a. If the predicted maximum concentration is less than the relevant ambient air concentration, the Control Officer shall not require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680;
b. If the predicted maximum concentration is greater than or equal to the relevant ambient air concentration:
i. The Control Officer shall require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680; or
ii. The applicant may use the Tier 3 or Tier 4 method for determining maximum public exposure to state HAPs, under subsection (B)(3).

3. Tier 3: Modified SCREEN Model. The applicant shall use the SCREEN Model, performed in a manner consistent with the Guideline specified in Section 17.16.590(A)(6)(a).
a. For evaluation of acute exposure, the applicant shall assume exposure in the ambient air.
b. For evaluation of chronic exposure:
i. The applicant may use exposure assumptions consistent with institutional or engineering controls that are permanent and enforceable outside the permit.
ii. The applicant shall notify the Control Officer of these controls. If the Control Officer does not approve of the proposed controls, or if the controls are not permanent and enforceable outside of the permit, the applicant shall not use the method specified in subsection (B)(3)(b) to determine maximum public exposure to the state HAP.
c. If the predicted maximum concentration is less than the relevant ambient air concentration, the Control Officer shall not require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680.
d. If the predicted maximum concentration is greater than or equal to the relevant ambient air concentration:
i. The Control Officer shall require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680; or
ii. The applicant may use the Tier 4 method for determining maximum public exposure to state HAPs, under subsection (B)(4).

4. Tier 4: Modified SCREEN or refined air quality model. The applicant shall employ either the SCREEN or a refined air quality model, performed in a manner consistent with the Guideline specified in Section 17.16.590(A)(6)(a).
a. For evaluation of acute exposure, the applicant shall assume exposure in the ambient air.
b. For evaluation of chronic exposure:
i. The applicant may use exposure assumptions consistent with institutional or engineering controls that are permanent and enforceable outside the permit.
ii. The applicant shall notify the Control Officer of these controls. If the Control Officer does not approve of the proposed controls, or if the controls are not permanent and enforceable outside of the permit, the applicant shall assume chronic exposure in the ambient air.
c. The applicant may include in the Tier 4 RMA documentation of the following factors:
i. The estimated actual exposure to the HAP of persons living in the airshed of the source;
ii. Available epidemiological or other health studies;
iii. Risks presented by background concentrations of hazardous air pollutants;

iv. Uncertainties in risk assessment methodology or other health assessment techniques;
v. Health or environmental consequences from efforts to reduce the risk; or
vi. The technological and commercial availability of control methods beyond those otherwise required for the source and the cost of such methods.

d. The applicant shall submit a written protocol for conducting an RMA, consistent with the requirements of this Section, to the Control Officer for the Control Officer's approval. If the Control Officer does not approve the written protocol, the applicant may;
i. Submit a revised protocol to the Control Officer;
ii. Propose HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680; or
iii. Refuse to submit a revised protocol, in which case the Control Officer shall deny the application.

e. If the predicted maximum concentration is less than the relevant ambient air concentration, or if warranted under the factors listed in subsection (B)(4)(c), the Control Officer shall not require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680.

f. Except as provided in subsection (B)(4)(e), if the predicted maximum concentration is greater than or equal to the relevant ambient air concentration, the Control Officer shall require compliance with HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680.

C. Health-based Ambient Air Concentrations of State HAPs.

1. For state HAPs for which the Control Officer has already determined an AAC, the applicant shall use the acute and chronic values listed in Table 3.

Table 3. Acute and Chronic Ambient Air Concentrations

Chemical	Acute AAC (mg/m^3)	Chronic AAC (mg/m^3)
1,1,1-Trichloroethane (Methyl Chloroform)	2.075	2.30E+00
1,1,2,2-Tetrachloroethane	18	3.27E-05
1,3-Butadiene	7,514	6.32E-05
1,4-Dichlorobenzene	300	3.06E-04
2,2,4-Trimethylpentane	900	NA
2,4-Dinitrotoluene	5.0	2.13E-05
2-Chloroacetophenone	NA	3.13E-05
Acetaldehyde	306	8.62E-04
Acetophenone	25	3.65E-01
Acrolein	0.23	2.09E-05
Acrylonitrile	38	2.79E-05
Antimony Compounds (Selected compound: Antimony)	13	1.46E-03
Arsenic Compounds (Selected compound: Arsenic)	2.5	4.41E-07
Benzene	1.276	2.43E-04
Benzyl Chloride	26	3.96E-05
Beryllium Compounds (Selected compound: Beryllium)	0.013	7.90E-07
Biphenyl	38	1.83E-01
Bis(2-Ethylhexyl) Phthalate	13	4.80E-04
Bromoform	7.5	1.72E-03
Cadmium Compounds (Selected compound: Cadmium)	0.25	1.05E-06
Carbon Disulfide	311	7.30E-01

Carbon Tetrachloride	201	1.26E-04
Carbonyl Sulfide	30	NA
Chlorobenzene	1,000	1.04E+00
Chloroform	195	3.58E-04
Chromium Compounds (Selected compound: Hexavalent Chromium)	0.10	1.58E-07
Cobalt Compounds (Selected compound: Cobalt)	10	6.86E-07
Cumene	935	4.17E-01
Cyanide Compounds (Selected compound: Hydrogen Cyanide)	3.9	3.13E-03
Dibenzofurans	25	7.30E-03
Dichloromethane (Methylene Chloride)	347	4.03E-03
Dimethyl formamide	164	3.13E-02
Dimethyl Sulfate	0.31	NA
Ethyl Benzene	250	1.04E+00
Ethyl Chloride (Chloroethane)	1,250	1.04E+01
Ethylene Dibromide (Dibromoethane)	100	3.16E-06
Ethylene Dichloride (1,2-Dichloroethane)	405	7.29E-05
Ethylene glycol	50	4.17E-01
Ethylidene Dichloride (1,1-Dichloroethane)	6,250	5.21E-01
Formaldehyde	17	1.46E-04
Glycol Ethers (Selected compound: Diethylene glycol, monoethyl ether)	250	3.14E-03
Hexachlorobenzene	0.50	4.12E-06
Hexane	11,649	2.21E+00
Hydrochloric Acid	16	2.09E-02
Hydrogen Fluoride (Hydrofluoric Acid)	9.8	1.46E-02
Isophorone	13	2.09E+00
Manganese Compounds (Selected compound: Manganese)	2.5	5.21E-05
Mercury Compounds (Selected compound: Elemental Mercury)	1.0	3.13E-04
Methanol	943	4.17E+00
Methyl Bromide	261	5.21E-03
Methyl Chloride	1,180	9.39E-02
Methyl Hydrazine	0.43	3.96E-07
Methyl Isobutyl Ketone (Hexone)	500	3.13E+00
Methyl Methacrylate	311	7.30E-01

Methyl Tert-Butyl Ether	1,444	7.40E-03
N,N-Dimethylaniline	25	7.30E-03
Naphthalene	75	5.58E-05
Nickel Compounds (Selected compound: Nickel Refinery Dust)	5.0	7.90E-06
Phenol	58	2.09E-01
Polychlorinated Biphenyls (Selected Compound: Aroclor 1254)	2.5	1.90E-05
Polycyclic Organic Matter (Selected compound: Benzo(a)pyrene)	5.0	2.02E-06
Propionaldehyde	403	8.62E-04
Propylene Dichloride	250	4.17E-03
Selenium Compounds (Selected compound: Selenium)	0.50	1.83E-02
Styrene	554	1.04E+00
Tetrachloroethylene (Perchlorethylene)	814	3.20E-04
Toluene	1,923	5.21E+00
Trichloroethylene	1,450	1.68E-05
Vinyl Acetate	387	2.09E-01
Vinyl Chloride	2,099	2.15E-04
Vinylidene Chloride (1,2-Dichloroethylene)	38	2.09E-01
Xylene (Mixed Isomers)	1,736	1.04E-01

2. For state HAPs for which an AAC has not already been determined, the applicant shall determine the acute and chronic AACs according to the process in Appendix 12 of the Arizona Administrative Code Title 18, Chapter 2.
3. For specific compounds included in state HAPS listed as a group (e.g. arsenic compounds), the applicant may use an AAC developed according to the process in Appendix 12 of the Arizona Administrative Code Title 18, Chapter 2.

D. As part of the risk management analysis, an applicant may voluntarily propose emissions limitations under Section 17.12.190 in order to avoid being subject to HAPRACT under Section 17.16.675, or AZMACT under Section 17.16.680.

E. Documentation of Risk Management Analysis. The applicant shall document each RMA performed for each state HAP and shall include the following information:
1. The potential maximum public exposure of the state HAP;
2. The method used to determine the potential maximum public exposure:
   a. For Tier 1, the calculation demonstrating that the emissions of the state HAP are less than the health-based ambient air concentration, determined under subsection (C)(3).
   b. For Tier 2, the input files to, and the results of the SCREEN Modeling.
   c. For Tier 3:
      i. The input files to, and the results of the SCREEN Modeling; and
      ii. The permanent and enforceable institutional or engineering controls approved by the Control Officer under subsection (B)(3)(b).
   d. For Tier 4:
      i. The model the applicant used;
      ii. The input files to, and the results of the modeling;
      iii. The modeling protocol approved by the Control Officer under subsection (B)(4)(b); and
      iv. The permanent and enforceable institutional or engineering controls approved by the Control Officer under subsection (B)(4)(d);
3. The health-based ambient air concentrations determined under subsection (C); and
4. Any voluntary emissions limitations that the applicant proposes under subsection (D) and Section 17.12.190.

F. An applicant may conduct an RMA for any alternative operating scenario requested in the application consistent with the requirements of this Section. The alternative operating scenario may allow a range of operating conditions if the

Control Officer concludes that the RMA demonstrates no adverse effects to human health or adverse environmental effects from operations within that range. Modifications to a source consistent with the alternative operating scenario are not subject to this Article**.**

17.16.690 Repealed
17.16.700 Repealed.