

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

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### NOTICE OF FINAL RULEMAKING

#### PIMA COUNTY AIR QUALITY CONTROL REGULATIONS PIMA COUNTY CODE

#### TITLE 17. AIR QUALITY CONTROL

#### CHAPTER 12. PERMITS AND PERMIT REVISIONS

[M07-344]

#### PREAMBLE

**1. Sections Affected**

PCC 17.12.465  
PCC 17.12.470  
PCC 17.12.470  
PCC 17.12.475  
Table 17.12.540

**Rulemaking Action**

New Section  
Amend  
Re-number  
New Section  
Amend

**2. Statutory authority for the rulemaking:**

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

Implementing Statutes: A.R.S. §§ 49-480, 49-112, and 11-251.08

**3. The effective date of the rule:**

July 5, 2007

**4. A list of all previous notices appearing in the Register addressing the final rule:**

Notice of Public Information: 13 A.A.R. 1565, May 4, 2007

Notice of Proposed Rulemaking: 13 A.A.R. 690, March 2, 2007

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

Name: Stacey Smith, Regulatory Planner

Address: Pima County DEQ  
150 W. Congress  
Tucson, AZ 85701

Telephone: (520) 740-3340

Fax: (520) 882-7709

E-mail: staceysmith@deq.pima.gov

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

The activity permit rules will be amended to allow the option for sources to obtain a single permit that authorizes multiple activities per project site rather than obtaining numerous permits for the same site. This permit will be categorized as a Multiple Activity Permit (MAP).

**7. Reference to any study relevant to the rule that the Control Officer reviewed and either relied or did or did not rely on in its evaluation of or justification for the rule, where the public may review each study, all data underlying each study, and any analysis of each study and other supporting material:**

None

**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 Pima County's air quality ordinances dealing with air quality activity permits. Currently, sources are required to obtain a permit for each fugitive dust producing activity at a project location. This rule will allow sources to obtain one permit authorizing all dust producing activities at a project location. The cost of the multiple activity permits is commensurate with the current cost of obtaining numerous single activity permits for one project. The new fees are separated into categories based upon project acreage. Businesses will also have the additional benefit of increasing the permit term of their fugitive dust activity permit term from one to two years. Additionally, PDEQ has developed clear terminology, as well as, improving the organization of the activity permit section. Although the requirements to obtain an activity permit have been in effect for many years, lack of clarification regarding exemptions left many businesses unsure of the permit thresholds. Additional definitions and expanded exemption language clearly defines the permitting thresholds and will reduce agency enforcement due to administrative violations.

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

Minor, non-substantive changes were made between publication of the notice of proposed rulemaking and this notice of final rulemaking.

**11. A summary of the comments made regarding the rule and the PDEQ's response to them:**

No comments were received.

**12. Any other matters prescribed by the 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:**

Not applicable

**14. Was this rule previously made as an emergency rule?**

No

**15. The full text of the rule follows:**

TITLE 17. AIR QUALITY CONTROL

CHAPTER 12. PERMITS AND PERMIT REVISIONS

ARTICLE IV. ACTIVITY PERMITS.

Section

- 17.12.465**      **Definitions.**  
**17.12.470**      **Fugitive dust** activity permits.  
**17.12.475**      **NESHAP activity permits.**

ARTICLE VI. FEES.

Section

- 17.12.540**      **Fugitive dust** activity permit fees.  
**Table 17.12.540** **Fugitive Dust** Activity Permit Fee Schedule.

**17.12.465**      **Definitions.**

In addition to the definitions contained in Section 17.04.340, words, phrases and terms used in this Article shall have the following meanings:

- A.**      "Demolition" means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or intentional burning of any facility.
- B.**      "Earthmoving" means the movement of earthen material which causes or has the potential to cause fugitive dust.
- C.**      "Fugitive Dust" means the particulate matter not collected by a capture system that is entrained in the ambient air and is caused from human, animal, and/or natural activities, such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind.
- D.**      "Project" means the specific plan, design or phase of the plan for which the person obtains a permit.
- E.**      "Regulated asbestos containing material" or "RACM" means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by 40 CFR 61, Subpart M.

F. "Renovation" means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

G. "Trenching" means the construction of a narrow excavation, in relation to its length, made below the surface of the ground for purposes of facilitating the installation and repair of underground utilities.

**17.12.470 Fugitive dust activity permits.**

~~A. Except as exempted in Table 17.12.540, n No person shall conduct, cause or allow land stripping, earthmoving, blasting (except blasting associated with an individual source permit issued for mining), trenching or road construction or commence demolition or renovation of any NESHAP facility without first obtaining an activity permit from the Control Officer.~~

B. There shall be two types of activity permits as follows:

1. A single activity permit shall be obtained by persons conducting any one of the following activities:

- a. Land stripping and/or earthmoving activities totaling more than one acre in size;
- b. Trenching activities totaling more than 300 feet in length;
- c. Road construction activities totaling more than 50 feet in length; and
- d. Blasting activities.

2. A multiple activity permit may be obtained by persons conducting more than one dust producing activity to include, but not limited to, land stripping, earthmoving, trenching, blasting, and road construction at a single project site covering an acre or greater.

~~BC. In the case of an emergency, action may be taken to stabilize the situation before obtaining an activity permit. Upon stabilizing the emergency situation, an activity permit shall be obtained.~~

~~C. An activity permit is valid for a period of one year from the date of issue.~~

~~D. Permittees shall notify the control officer within five working days of the start and completion of the project.~~

~~E. This section shall not apply to sources which obtain a Class I or Class II air quality permit from the director pursuant to ARS § 49-426 or from the control officer pursuant to Section 17.12.140 for any activity allowed by the Class I or Class II permit, except for asbestos NESHAP activities. The following terms apply to the duration of the activity permit:~~

- 1. An activity permit is valid for one year from the date of issue.
- 2. Upon approval by the control officer, two permits covering the same scope of work or identical project may be obtained and will be valid for a period of two years from the date of issue.
- 3. Permit coverage shall not be transferred from the original permit holder.
- 4. Permits may be voluntarily terminated pursuant to Section 17.12.275.

~~F. Sources are not required to obtain an activity permit pursuant to this section for activities involving asbestos cement pipe; however, such sources shall comply with all other local, state and federal requirements applicable to such materials. The following exemptions will apply to this Section:~~

- 1. Class I, II, or III air quality permit holders pursuant to Section 17.12.140 whose permit authorizes the above described activities in subsection B.1.a through d.
- 2. Trenching activities associated with the installation of irrigation lines for landscaping purposes that disturbs less than the first foot of topsoil.
- 3. Trenching activities located beneath a road for which a current fugitive dust activity permit for road construction has been issued.

**17.12.475 NESHAP activity permits.**

~~A. No person shall allow or commence demolition or renovation of any NESHAP facility as defined in 40 CFR 61 Subpart M without first obtaining an activity permit from the control officer.~~

B. A NESHAP activity permit shall be obtained by persons conducting the following activities:

- 1. Demolition of load supporting structural members.
- 2. Renovation of more than 260 linear feet of RACM on pipes.
- 3. Renovation of more than 160 square feet of RACM on other facility components.
- 4. Renovation of more than 35 cubic feet of RACM off facility components.

<b>Table 17.12.540 FUGITIVE DUST ACTIVITY PERMIT FEES SCHEDULE (effective <del>July 1, 2003</del> July 5, 2007)</b>			
<b>S.S.<sup>1</sup></b>	<b>ACTIVITY</b>	<b>RATE COMPONENTS</b>	<b>EXEMPTIONS</b>
A	Land stripping and/or Earthmoving	>1-2 Acres \$ 100.00 >2-10 Acres \$ 500.00 >10-40 Acres \$ 1,500.00 >40+ Acres \$ 3,000.00	<1 Acre
B	Trenching	300-500 Ft. \$ 75.00 501-1500 Ft. \$ 200.00 1501-5000 Ft. \$ 400.00 5001+ Ft. \$ 800.00	<300 Ft., Trenching for Landscaping

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**County Notices Pursuant to A.R.S. § 49-112**

C	Road Construction	50-1000 Ft. \$ 50.00 1001-3000 Ft. \$ 250.00 3001-6000 Ft. \$ 500.00 6001+ Ft. \$ 1,000.00	<50 Ft.
D	Demolition or Renovation of NESHAP-Facility	\$420.00	See Exemption Note
ED	Blasting	\$18.00 plus \$3.53 per day of blasting \$ 25.00	None
E	<u>Multiple Activity Permit</u>	>1-10 Acres \$ 625.00 >10-40 Acres \$ 2,000.00 >40+ Acres \$ 4,000.00	
<u>NESHAP Activity Permit</u>			
F	Demolition or Renovation of NESHAP Facility	\$420.00	
<p>Exemption Note:                  &lt;260 linear feet on pipes;                  &lt;160 square feet on other facility components;                  &lt;35 cubic feet off facility components</p> <hr/> <p><sup>1</sup>Sub-schedule for identification only.</p>			

**NOTICE OF FINAL RULEMAKING**

PURSUANT TO A.R.S. §§ 49-112 AND 49-471.01 ET SEQ.

**PINAL COUNTY AIR QUALITY CONTROL DISTRICT**

[M07-348]

**1. Preamble**

- A. The District proposed that the Board of Supervisors adopt or amend certain rules under authority of A.R.S. §§49-479 and 49-480, which respectively authorize the board to adopt rules to control air pollution and to adopt a stationary source permit program. Affected rules are identified, and corresponding changes discussed in subsection D. of this preamble, and include the following sections:

<b>Section Affected</b>	<b>Rulemaking Action</b>
§1-1-105	Amend
§1-3-140	Amend
§3-1-030	Amend
§3-1-040	Amend
§3-1-055	Amend
§3-1-107	Amend
§3-2-180	Amend
§3-3-250	Amend
§3-5-530	Amend
§7-2	New
§Appendix L	New

- B. Those wishing further information regarding any aspect of this rulemaking may contact Scott DiBiase, Planning Manager, Pinal County Air Quality, 31 North Pinal St., Building F, Florence, Arizona, 520-866-6929. To the extent possible, the District will also post information on the County's website, [www.co.pinal.az.us](http://www.co.pinal.az.us), under the "air quality" link.
- C. The rule making process consisted of an initial administrative rule development process, including the Notice of Proposed Rulemaking & Notice of Oral Proceeding, a 30 day public comment period, an oral proceeding before the Control Officer or his designee and a public hearing before the Board of Supervisors. The oral proceeding was conducted on May 9, 2007 in the Emergency Operations Center Hearing Room, Administration Building F, 31 North Pinal Street, Florence, Arizona. The public hearing was conducted on June 13, 2007 before the Board of Supervisors in the Board of Supervisors Hearing Room, Administration Building A, 31 North Pinal Street, Florence, Arizona.

D. The revisions include the following:

Arizona Revised Statutes (A.R.S.) §49-480.04(A) requires that within six months after the adoption of rules pursuant to A.R.S. §49-426.06(A)-State Program For Control Of Hazardous Air Pollutants, the Board Of Supervisors shall by rule establish a county program for the control of hazardous air pollutants that meets the requirements of A.R.S. §49-480.04-County Program For Control Of Hazardous Air Pollutants. Since the Arizona Administrative Procedure Act does not define “adoption” and since the Arizona Department Of Environmental Quality (ADEQ) delayed the effective date of the State hazardous air pollutants (HAPs) program until January 1, 2007, counties have until July 1, 2007 to comply with A.R.S. §49-480.04(A) - to establish, by rule, a county program for the control of hazardous air pollutants.

This rulemaking creates Chapter 7, Article 2 – Pinal County Hazardous Air Pollutants (HAPs) Program as required by Arizona Revised Statutes (A.R.S.) §49-480.04, and creates Appendix L - Procedures For Determining Ambient Air Concentrations For Hazardous Air Pollutants.

In addition, the rulemaking amends the following existing sections:

- §1-1-105
- §1-3-140
- §3-1-030
- §3-1-040
- §3-1-055
- §3-1-107
- 3-2-180
- §3-3-250
- §3-5-530

The Pinal County Hazardous Air Pollutants (HAPs) Program meets the requirements of A.R.S. §49-480.04-County Program for Control of Hazardous Air Pollutants and is similar to and no more stringent than ADEQ’s Arizona program for the regulation of HAPs. ADEQ’s Arizona program for the regulation of HAPs is intended to replace the Arizona Ambient Air Quality Guidelines (AAAQG), which are health-based guidelines/acceptable concentration levels for hazardous air pollutants that are regulated by the State Of Arizona. The AAAQGs are not standards but residential screening values that help agencies make sound environmental risk management decisions to protect human health.

Applicability: The Pinal County Hazardous Air Pollutants (HAPs) Program applies to new sources of HAPs or modified sources of HAPs. The Pinal County Hazardous Air Pollutants (HAPs) Program also applies to existing sources of HAPs, when such existing sources increase the emissions of a hazardous air pollutant by more than a de minimis amount. De minimis amount, for the purpose of the Pinal County Hazardous Air Pollutants (HAPs) Program, reflects the maximum amount of a pollutant that could be emitted as a result of a modification without producing adverse effects to human health. Hazardous air pollutants (HAPs) to be regulated by this program are the hazardous air pollutants on the federal list of hazardous air pollutants - Section 112(b) of the Clean Air Act.

New Major Sources Of HAPs: The Pinal County Hazardous Air Pollutants (HAPs) Program applies to new major sources of HAPs. New major sources of HAPs are sources that emit or have the potential to emit either 10 tons per year (tpy) of a single listed HAP or 25 tpy of any combination of listed HAPs. The Pinal County Hazardous Air Pollutants (HAPs) Program requires new major sources of HAPs to implement, on a case-by-case basis, Arizona Maximum Achievable Control Technology (AZMACT). A new major source of HAPs is exempted from this requirement, if the new major source of HAPs conducts a Risk Management Analysis (RMA). An RMA is a scientifically sound analysis that shows that the imposition of control technology in a specific case is unnecessary to avoid adverse effects to human health or the environment. Also, the Pinal County Hazardous Air Pollutants (HAPs) Program requires new major sources of HAPs to obtain a new permit that would include either Arizona Maximum Achievable Control Technology (AZMACT) or a Risk Management Analysis (RMA).

Modifications To Existing Major Sources Of HAPs: The Pinal County Hazardous Air Pollutants (HAPs) Program applies to existing major sources of HAPs (i.e., sources that emit or have the potential to emit either 10 tons per year (tpy) of a single listed HAP or 25 tpy of any combination of listed HAPs) that make a modification (i.e., increase the emissions of a HAP by more than a de minimis amount). De minimis amount, for the purpose of the Pinal County Hazardous Air Pollutants (HAPs) Program, reflects the maximum amount of a pollutant that could be emitted as a result of a modification without producing adverse effects to human health. The Pinal County Hazardous Air Pollutants (HAPs) Program requires that existing major sources of HAPs that make a modification (i.e., increase the emissions of a HAP by more than a de minimis amount) obtain a significant permit revision that includes either Arizona Maximum Achievable Control Technology (AZMACT) or a Risk Management Analysis (RMA).

New Minor Sources Of HAPs: The Pinal County Hazardous Air Pollutants (HAPs) Program applies to new minor sources of HAPs. New minor sources of HAPs are sources that emit or have the potential to emit either 1 ton per year (tpy) of a single listed HAP or 2.5 tpy of any combination of listed HAPs, if such new minor sources of HAPs belong

to one of the 24 source categories listed in Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, Table 1- Pinal County HAPs Minor Source Categories. The sources included in the 24 source categories listed in Chapter 7, Article 2, Table 1 have been determined to emit HAPs that individually or in the aggregate result in adverse effects to human health or adverse environmental effects (i.e., effects that result in or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness). The Pinal County Hazardous Air Pollutants (HAPs) Program requires new minor sources of HAPs to implement, on a case-by-case basis, Hazardous Air Pollutant Reasonably Available Control Technology (HAPRACT). A new minor source of HAPs is exempted from this requirement, if the new minor source of HAPs conducts a Risk Management Analysis (RMA). Also, the Pinal County Hazardous Air Pollutants (HAPs) Program requires new minor sources of HAPs to obtain a new permit that would include either a proposal for Hazardous Air Pollutant Reasonably Available Control Technology (HAPRACT) or a Risk Management Analysis (RMA).

Modifications to Existing Minor Sources Of HAPs: The Pinal County Hazardous Air Pollutants (HAPs) Program applies to existing minor sources of HAPs (i.e., sources that emit or have the potential to emit either 1 ton per year (tpy) of a single listed HAP or 2.5 tpy of any combination of listed HAPs), if such existing minor sources of HAPs belong to one of the 24 source categories listed in Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, Table 1- Pinal County HAPs Minor Source Categories that make a modification (i.e., increase the emissions of a HAP by more than a de minimis amount). The Pinal County Hazardous Air Pollutants (HAPs) Program requires that existing minor sources of HAPs that make a modification (i.e., increase the emissions of a HAP by more than a de minimis amount) obtain a significant permit revision that includes either Hazardous Air Pollutant Reasonably Available Control Technology (HAPRACT) or a Risk Management Analysis (RMA).

- E. A reference to any study relevant to the rule that the agency reviewed and either 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:

The Pinal County Hazardous Air Pollutants (HAPs) Program is similar to and no more stringent than the Arizona Department Of Environmental Quality's (ADEQ's) Arizona program for the regulation of HAPs. The studies relevant to the Arizona Department of Environmental Quality's (ADEQ's) Arizona program for the regulation of HAPs are relevant to the Pinal County Hazardous Air Pollutants (HAPs) Program:

Arizona Hazardous Air Pollutant Research Program, Final Report (ENSR Consulting and Engineering, August 1995). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007.

Arizona DEQ – Development of Chronic Ambient Air Concentrations (Long-Term) (Weston Solutions, Inc., April 2005). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007, and online at <http://www.azdeq.gov/function/laws/download/hapsambient.pdf>.

Arizona DEQ – Development of Acute Health-Based Ambient Air Criteria (Weston Solutions, Inc., June, 2005). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007, and online at <http://www.azdeq.gov/function/laws/download/hapsacute.pdf>.

Procedure for Air Quality Dispersion Modeling for the Arizona HAPRACT Rule (Weston Solutions, Inc., July, 2005). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007, and online at <http://www.azdeq.gov/function/laws/download/hapsmodel.pdf>.

Determination of De Minimis Levels (Weston Solutions, Inc. August 2005). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007, and online at <http://www.azdeq.gov/function/laws/download/hapsdemin.pdf>.

Modeling Analysis Spreadsheet, Screen Modeling for Source Categories, (Weston Solutions, September, 2005). Available for review at the ADEQ Library, First Floor, 1110 W. Washington St., Phoenix, AZ 85007, and online at <http://www.azdeq.gov/function/laws/download/hapssspread.pdf>.

- F. Economic, small business and consumer impact statement

The Pinal County Hazardous Air Pollutants (HAPs) Program creates Rule Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, a Pinal County program for the regulation of hazardous air pollutants (HAPs) as required by Arizona Revised Statutes (A.R.S.) §49-480.04, and creates Appendix L - Procedures For Determining Ambient Air Concentrations For Hazardous Air Pollutants. In addition, the rulemaking amends existing rules §1-1-105, §1-3-140, §3-1-030, §3-1-040, §3-1-055, §3-1-107, §3-2-180, §3-3-250, §3-5-530 to reflect the requirements of the new program and to improve the rules' clarity, conciseness, and regulatory uniformity among related rules in the Pinal County Air Pollution Control Regulations.

*Arizona Administrative Register / Secretary of State*  
**County Notices Pursuant to A.R.S. § 49-112**

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The Pinal County Hazardous Air Pollutants (HAPs) Program is similar to and no more stringent than the Arizona Department Of Environmental Quality's (ADEQ's) Arizona program for the regulation of HAPs. The Pinal County Hazardous Air Pollutants (HAPs) Program applies to new sources of HAPs or modified sources of HAPs. The Pinal County Hazardous Air Pollutants (HAPs) Program also applies to existing sources of HAPs, when such existing sources increase the emissions of a hazardous air pollutant by more than a de minimis amount. Hazardous air pollutants (HAPs) regulated by this program are the hazardous air pollutants on the federal list of hazardous air pollutants - Section 112(b) of the Clean Air Act.

The Pinal County Hazardous Air Pollutants (HAPs) Program:

- Adopts the federally listed hazardous air pollutants
- Lists de minimis levels for Pinal County hazardous air pollutants (HAPs) in Chapter 7, Article 2, Table 2-Pinal County HAPs De Minimis Levels
- Lists 24 minor source categories subject to the program in Chapter 7, Article 2 -Pinal County Hazardous Air Pollutants (HAPs) Program, Table 1-Pinal County HAPs Minor Source Categories

Other sections in new Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, provide for case by case determinations of Hazardous Air Pollutant Reasonably Available Control Technology (HAPRACT) and Arizona Maximum Achievable Control Technology (AZMACT), risk management analyses, and periodic review.

**Introduction:** The Pinal County Hazardous Air Pollutants (HAPs) Program will protect human health and the environment through the application of control technology to reduce emissions of HAPs. The statute authorizes a risk reduction approach similar to the federal New Source Review Program that requires source-specific control technology (A.R.S. §49-426.06). New and modified sources under this program could be impacted.

New Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program will require the determination of control technology on a case-by-case basis through permits for new sources and permit modifications for existing sources. The level of control technology will vary by the size of the source (i.e., major sources will be subject to AZMACT, while minor sources will be subject to HAPRACT). Although this is not a risk management program, a source subject to this program may conduct a risk management analysis (RMA) to avoid the application of a control technology. The rule provides for risk management analyses using a tiered approach. The tiers range in complexity: Tier 1 is a relatively simple, arithmetic calculation while Tier 4 could involve emission modeling and the development of a site specific risk assessment. Tiers 1-3 are expected to generate minimal compliance costs, while Tier 4 could result in relatively moderate compliance costs. However, the overall compliance costs to a source could be significantly reduced by conducting an RMA.

New Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program regulates emissions of 187 HAPs that are the basis of the federal HAPs control program. All major sources of HAPs with the potential to emit (PTE) 10 tons per year (tpy) of a single HAP or 25 tpy of any combination of HAPs will be subject to this program. Minor sources, those with a PTE of one tpy of a single HAP or 2.5 tpy of any combination of HAPs, which belong to the 24 categories listed in the new Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program will also be subject to this program.

New Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program also establishes de minimis amounts for listed HAPs for new sources or existing sources making modifications. If a modification results in an increase of actual emissions of any regulated HAP by more than any de minimis amount or results in the emission for any HAP not previously emitted by more than the relevant de minimis amount, the source would be subject to the program (A.R.S. §49-401.01).

Classes Of Persons Impacted. Entities impacted by this rulemaking include:

- New major sources emitting HAPs (i.e., sources that emit or have the potential to emit either 10 tons per year (tpy) of a single listed HAP or 25 tpy of any combination of listed HAPs)
- Existing major sources of HAPs (i.e., sources that emit or have the potential to emit either 10 tons per year (tpy) of a single listed HAP or 25 tpy of any combination of listed HAPs) that make a modification resulting in emissions greater than the de minimis amounts listed in the new Chapter 7, Article 2 -Pinal County Hazardous Air Pollutants (HAPs) Program, Table 2
- New minor sources that emit or have the potential to emit either 1 ton per year (tpy) of a single listed HAP or 2.5 tpy of any combination of listed HAPs, if such new minor sources of HAPs belong to one of the 24 source categories listed in Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, Table 1
- Existing minor sources of HAPs (i.e., sources that emit or have the potential to emit either 1 ton per year (tpy) of a single listed HAP or 2.5 tpy of any combination of listed HAPs) that belong to one of the 24 source categories listed in Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, Table 1 and that make a modification resulting in emissions greater than the de minimis amounts listed in the new Chapter 7, Article 2 - Pinal County Hazardous Air Pollutants (HAPs) Program, Table 2
- Consultants, including engineering services, lawyers, and associated businesses
- Pollution control vendors

- ADEQ, as the implementing agency
- Counties with approved air pollution control programs
- The general public

From Pinal County emissions inventory records, 21 minor sources reported HAP emissions in 2005 and of those 21 sources, 10 sources belong to the source categories for minor sources subject to the Pinal County HAPs Program:

Primary SIC Code	Source Category	Number of Minor Sources
2434	Wood Kitchen Cabinets	0
2451	Mobile Homes	1
2621	Paper Mills	0
2679	Converted Paper Products – Not Elsewhere Classified	0
2851	Paints and Allied Products	1
2911	Petroleum Refining	0
3086	Plastics Foam Products	2
3088	Plastics Plumbing Fixtures	0
3089	Plastics Products – Not Elsewhere Classified	0
3241	Cement – Hydraulic	0
3281	Cut Stone and Stone Products	0
3296	Mineral Wool	1
3312	Blast Furnaces and Steel Mills	0
3331	Primary Copper	0
3411	Metal Cans	0
3444	Sheet Metal Work	2
3451	Screw Machine Products	0
3479	Metal Coating And Allied Services	1
3585	Refrigeration And Heating Equipment	0
3672	Printed Circuit Boards	0
3999	Manufacturing Industries – Not Elsewhere Classified	1
4922	Natural Gas Transmission	1
5169	Chemicals And Allied Products – Not Elsewhere Classified	0
5171	Petroleum Bulk Stations And Terminals	0

**Probable Costs and Benefits.** Pinal County expects the probable benefits to outweigh the probable costs of this rulemaking. The rulemaking is not expected to have a negative impact on state revenues. Potentially, permit fees, annual inspection fees, and the associated hourly fee revenues to Pinal County will increase.

**Sources (Major And Minor).** The compliance impact of this rulemaking is dependent upon the number of new and modified sources that would have to comply and the time period considered. It also will be dependent on the proportion of major sources versus minor sources that must comply with the rule provisions. Pinal County expects compliance costs to vary among sources and across industry groups, depending on the type of HAPs emitted and the technology required to control those pollutants. As a result, smaller business sources could experience a higher per unit cost of output than larger sources. Some small businesses (minor sources) will have to obtain an air quality permit that could cost approximately \$20,000 over five years. This cost includes processing fees and annual inspection fees. Costs could also include permit applications, significant permit revisions, Risk Management Analysis' (RMAs), capital expenditures, increased operation and maintenance, and testing. Annualized costs could range from a few thousand dollars to hundreds of thousands of dollars. Because the cost of pollution control equipment is so variable and dependent on the type of HAPs emitted as well as the configuration of the control devices, it is not possible to estimate a total compliance cost to sources at this time. The preparation of RMAs could range from a simple calculation (Tier 1) to using the SCREEN Model (Tier 2) or a modified SCREEN Model (Tier 3). The final tier (Tier 4) would require either the SCREEN model or a refined model. Preliminary information suggests that costs to sources could range from a very minimal dollar amount to \$10,000 for Tiers 1-3, and for Tier 4 evaluations, as much as \$250,000. Pinal County expects sources to pass on part, if not most, of the increased costs of compliance to consumers, depending on price elasticity of demand and supply, as well as market conditions.



**Consultants (Engineering Services, Laboratories, Epidemiologists, Lawyers, And Associated Businesses).** This group of classes impacted is expected to experience increasing revenues as sources seek consulting services for permit applications, significant permit revisions, testing, Risk Management Analysis' (RMAs), and other associated services. Potentially, increased revenues for this class of persons could range from several thousand dollars to hundreds of thousands of dollars.

**Political Subdivisions of The State.** Unless a political subdivision is an emitter of HAPs, it will be unaffected by this rulemaking.

**Pollution Control Vendors.** This represents another class of persons that is expected to experience increased revenues as sources install air pollution control equipment. Potentially, revenues could range from several thousands of dollars to hundreds of thousands of dollars. Revenues would depend on the quantity and type of control equipment installed by sources.

**Pinal County Air Quality Department.** In addition to the resources used for activities associated with proposing this rulemaking, Pinal County estimates that the current staffing level will be sufficient to implement and enforce Pinal County's HAPs Program.

**Employment (Private and Public).** As previously indicated by the potential for increased compliance costs, Pinal County expects a higher demand for labor requirements for sources impacted by this rulemaking as well as increased labor requirements from the "consulting" class of persons. Pollution control vendors, however, are expected to handle the increase in sales with their current level of personnel. Pinal County does not expect short-term or long-term employment, production, or industrial growth in Pinal County to be negatively impacted. Product prices and profitability may only be affected in a minor fashion. Further, no facility closures are expected from the implementation of this rulemaking. Finally, competition is not expected to be impacted in an adverse way.

**General Public.** Hazardous air pollutants include numerous chemical compounds that could produce cancer and other adverse health effects such as respiratory disease, birth defects, eye irritation, and effects on the nervous system. HAPs may result in excess cancer deaths with greater risks to persons living near the sources. Therefore, reductions in HAPs emissions should result in health benefits. Reductions in HAPs emissions also could have a greater positive impact on persons in higher risk categories, such as children, elderly, and those whose health status has been compromised. Exposure to HAPs can increase the risk of experiencing health problems. Adverse health impacts can range from relatively minor (e.g., skin rash, nausea, cough, headache, dizziness) to severe, including irreversible, debilitating, and life threatening effects (e.g., asthma, chronic bronchitis, emphysema, kidney and liver damage, and reproductive disorders). Sometimes full recovery may occur, while other times, recovery may be slow and incomplete. Excess cancer deaths can be attributable to HAPs emissions. Populations living near sources emitting HAPs may be at greater risk of getting cancer and other non-cancer effects. Exposure to certain types of HAPs (e.g., hydrogen fluoride, hydrogen chloride, and HAP metals) causes adverse chronic and acute health effects. Chronic health disorders include irritation to lung, skin, and mucus membranes, certain effects on central nervous system, and damage to kidneys. Acute health effects include lung irritation, congestion, alimentary effects, such as nausea and vomiting, and effects on kidney and central nervous system. HAPs emissions also can cause adverse environmental impacts on wildlife, aquatic life, and other natural resources. The statute includes the consideration of overall environmental impacts, and Pinal County considers the approach taken in this rulemaking to have a collateral benefit to wildlife, aquatic life and other natural resources as sources now subject to regulation would not be required to control HAPs under the current approach. Potential health and environmental benefits are expected to accrue as HAPs emissions are reduced in Pinal County. Consumers may experience higher product costs as sources pass-on higher compliance costs. However, any increases in product costs are expected to be minimal. In some cases, sources may experience less profit from the higher costs of doing business.

**Small Business Reduction of Impacts.** State law requires agencies to reduce the impact of a rule on small businesses by using certain methods, when they are legal and feasible, in meeting the statutory objectives of the rulemaking. Pinal County considered each of the methods prescribed in Arizona Revised Statutes (A.R.S.) §41-1035 and A.R.S. §41-1055(B) for reducing the impact on small businesses. Methods that may be used include the following: (1) exempt them from any or all rule requirements, (2) establish performance standards that would replace any design or operational standards, or (3) institute reduced compliance or reporting requirements, such as establishing less stringent requirements, consolidating or simplifying them or setting less stringent schedules or deadlines. Other than the following examples, Pinal County could not find other alternative methods that would reduce the impact of this rulemaking on small businesses, or that would be less intrusive or less costly to implement the statutory objectives. Although all sources may take advantage of methods to reduce or eliminate impacts, Pinal County is sensitive to the needs of small businesses. As a result, this rulemaking allows sources to do the following: (1) perform a Risk Management Analysis (RMA) to establish the applicability of HAPRACT or AZMACT, (2) voluntarily propose an emissions limitation in order to avoid the imposition of HAPRACT or AZMACT, (3) apply for a general permit, or (4) control HAPs emissions through the application of certain design measures, work practices, process changes, or techniques. Additionally, sources could reject the implementation of certain proposed control technologies by

considering economic impacts and cost effectiveness in an RMA. This means that some costly control measures potentially could be eliminated by determining adverse economic, environmental, or energy impacts. Finally, if a reliable method of measuring HAPs emissions is not available, instead of imposing a numeric emissions limitation, a design, equipment, work practice, or operational standard, or some combination thereof, would be required.

- G. In accord with A.R.S. §49-471.07(F), the rule changes took effect upon approval by the Board of Supervisors on June 13, 2007.
- H. Compliance with the Fee-limitations of A.R.S. §49-112 (A) or (B).

Based on information and belief, the Director of the Pinal County Air Quality Control District affirms the following:

Initially, the total of the fees and other charges currently assessed in connection with the administration of the County's air quality program do not now equal the cost of program administration. To the extent that both the County and ADEQ impose parallel fees, the County's fees are capped by rule at ADEQ's rates, which implicitly affirms that the County's fees are reasonable. To the extent the County's program affects certain sources that ADEQ either does not regulate or does not charge, these changes do not impose any additional fees on those sources.

- I. A Notice of Proposed Rulemaking and Notice of Oral Proceeding were published in 13 A.A.R. 1146, March 30, 2007.
- J. Concise Explanatory Statement in accord with A.R.S. §49-471.05(09)

**PINAL COUNTY AIR QUALITY  
CONCISE EXPLANATORY STATEMENT**

Pertaining to Proposed Revisions to the Pinal County Air Quality Control District Code of Regulations considered by the Board of Supervisors on June 13, 2007.

See 13 A.A.R. 1146 (3/30/07) for Background

- 1. Pinal County Air Quality proposed a number of revisions to local air quality rules, and both the full text of those proposals and an underlying explanation were published in the Arizona Administrative Register. See 13 A.A.R. 1146 (3/30/07) ("AAR Notice").
- 2. The AAR Notice scheduled an Oral Proceeding before the Control Officer for May 9, 2007, and scheduled a close to the public comment period at the close of business on that day.
- 3. As proposed for final adoption by the Board of Supervisors on June 13, 2007, there were no changes to the rule proposal as published in the AAR Notice

**2. The full text of the changes follows:**

**1-1-105. SIP list**

- A. As a declaration of Board policy rather than a rule, and subject to the limitations of paragraphs B. and C. of this section, the Board of Supervisors expressly designates the following list of sections within this Code, to be presented to the Governor of Arizona for transmittal to the Administrator of the EPA with a request that they be included as elements in the Arizona SIP:
  - 1. Chapter 1
    - a. No change
    - b. No change
    - c. Article 3. (As amended 5/14/97, 5/27/98 and 10/27/04, except for §1-3-130 and the definition in ~~§1-3-140.81~~ §1-3-140.82 (10/12/95) of "maximum achievable control technology.")
  - 2. Chapter 2
    - a. No change
    - b. No change
    - c. No change
    - d. No change
    - e. No change
    - f. No change
    - g. No change
    - h. No change
  - 3. Chapter 3
    - a. No change

- b. No change
- c. No change
- d. No change
- 4. Chapter 4
  - a. No change.
  - b. No change
- B. Notwithstanding the approval as elements of the SIP of those provisions of the Code identified in paragraph A of this section, those provisions, save §3-1-084 which shall be expressly exempted from the limitation of this paragraph, shall operate as elements of the SIP only insofar as they pertain to:
  - 1. "construction," as defined in Nov. '93 Code §1-3-140.28; or
  - 2. "modification," as defined in Nov. '93 Code ~~§1-3-140.84~~ §1-3-140.85; and
- C. No change
- D. No change

**1-3-140. Definitions**

Definitions used in this Code shall have the following meanings except where any narrative portion specifically indicates otherwise:

- 1. ACID MIST - No change
- 1.a ACT - No change
- 2. ACTIVITY EQUIPMENT - No change
- 3. ACTUAL EMISSIONS - No change
- 4. ADEQ DIRECTOR - No change
- 5. ADMINISTRATOR - No change
- 6. ADVISORY COUNCIL - No change
- 7. AFFECTED FACILITY - No change
- 8. AIR CONTAMINANTS - No change
- 9. AIR POLLUTANT - No change
- 10. AIR POLLUTION - No change
- 11. AIR POLLUTION CONTROL EQUIPMENT - No change
- 12. ALLOWABLE EMISSIONS - No change
- 13. AMBIENT AIR - No change
- 14. APPLICABLE IMPLEMENTATION PLAN - No change
- 15. APPLICABLE REQUIREMENT - No change
- 16. APPROVED - No change
- 16.a AREA SOURCE
  - Depending upon context:
    - 1. Any stationary source of hazardous air pollutants that is not a major source as defined in ~~§1-3-140.79.b~~ §1-3-140.80.b; or
    - 2. A non-point source of any regulated pollutant.
- 17. ARIZONA STATE IMPLEMENTATION PLAN - No change
- 18. ARIZONA TESTING MANUAL - No change
- 19. ATTAINMENT AREA - No change
- 19.a. BEGIN ACTUAL CONSTRUCTION - No change
- 20. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) - No change
- 21. BUILDING, STRUCTURE, FACILITY or INSTALLATION - No change
- 22. BOARD - No change
- 23. BULK PLANT - No change
- 24. BULK TERMINAL - No change
- 24.a. CAPACITY FACTOR -No change
- 25. CATEGORICAL SOURCE - No change
- 26. CODE - No change
- 27. COMMENCE (used as a verb) -No change
- 28. CONSTRUCTION - No change
- 29. CONTIGUOUS GEOGRAPHICAL AREA - No change
- 30. CONTROL - No change
- 31. CONTROL DEVICE - No change
- 32. CONTROL OFFICER - No change
- 33. CONVENTIONAL AIR POLLUTANT - No change
- 34. COUNTY - No change
- 35. CRITERIA POLLUTANT - No change
- 36. DAY -No change
- 37. *DE MINIMIS* AMOUNT - No change
- 38. DELIVERY VESSELS - No change
- 39. DEPARTMENT - No change
- 40. DEPUTY CONTROL OFFICER - No change

- 41. DEVICE, MACHINE, EQUIPMENT or OTHER ARTICLES - No change
- 42. DISCHARGE - No change
- 43. DISPENSING TANK - No change
- 44. DISTRICT - No change
- 45. DOWNWASH - No change
- 46. DRY WASH - No change
- 47. DUST - No change
- 48. DUST SUPPRESSANT - No change
- 49. EMERGENCY ELECTRICAL ENERGY EQUIPMENT -No change
- 50. EMISSION - No change
- 51. EMISSION LIMITATION and EMISSION STANDARD - No change
- 52. EMISSIONS UNIT - No change
- 53. EQUIPMENT - No change
- 54. EXCESS EMISSIONS - No change
- 55. EXCESS ORGANIC LIQUID DRAINAGE - No change
- 56. EXISTING SOURCE - No change
- 57. FARM - No change
- 58. FEDERAL APPLICABLE REQUIREMENT - No change
- 59. FEDERALLY ENFORCEABLE - No change
- 60. FEDERALLY LISTED HAZARDOUS AIR POLLUTANT - No change
- 61. FLOATING ROOF - No change
- 62. FLUE - No change
- 63. FOSSIL FUEL-FIRED STEAM GENERATOR - No change
- 64. FUEL - No change
- 65. FUGITIVE DUST - No change
- 66. FUGITIVE EMISSIONS - No change
- 67. GAS TIGHT - No change
- 68. GASOLINE - No change
- 69. GASOLINE VAPORS - No change
- 70. HAUL ROAD - No change
- 71. HAZARDOUS AIR POLLUTANT: No change
- 72. HAZARDOUS AIR POLLUTANT REASONABLY AVAILABLE CONTROL TECHNOLOGY (HAPRACT) - An emissions standard for hazardous air pollutants which the Control Officer, acting pursuant to §49-480.04(C), determines is reasonably available for a source. In making the foregoing determination, the Control Officer shall take into consideration the estimated actual air quality impact of the standard, the cost of complying with the standard, the demonstrated reliability and widespread use of the technology required to meet the standard, and any non-air quality health and environmental impacts and energy requirements. For purposes of this definition, an emissions standard may be expressed as a numeric emissions limitation or as a design, equipment, work practice, or operational standard.
- ~~7273.~~ HAZARDOUS WASTE - No change
- ~~7374.~~ HEARING BOARD - No change
- ~~7475.~~ HEREIN - No change
- ~~74a75a.~~ INSIGNIFICANT ACTIVITY - No change
- ~~7576.~~ LAND STRIPPING or LAND STRIPPING ACTIVITY - No change
- ~~7677.~~ LEAK FREE - No change
- ~~7778.~~ LOADING FACILITY - No change
- ~~7879.~~ MAJOR MODIFICATION - No change
- ~~7980.~~ MAJOR SOURCE (MAJOR STATIONARY SOURCE) - No change
- ~~8081.~~ MALFUNCTION - No change
- ~~8182.~~ MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) - No change
- ~~8283.~~ MINING ACTIVITY - No change
- ~~8384.~~ MINOR SOURCE - No change
- ~~8485.~~ MODIFICATION or MODIFY - No change
- ~~8586.~~ NET EMISSIONS INCREASE - No change
- ~~8687.~~ NEW SOURCE - No change
- ~~8788.~~ NONATTAINMENT AREA - No change
- ~~8889.~~ NONPOINT SOURCE - No change
- ~~8990.~~ NON-PRECURSOR ORGANIC COMPOUND - No change
- ~~9091.~~ NORMAL FARM OPERATIONS - No change
- ~~9192.~~ ODOR - No change
- ~~9293.~~ OPACITY - No change
- ~~9394.~~ OPEN OUTDOOR FIRE or OPEN BURNING - No change
- ~~9495.~~ ORGANIC COMPOUND - No change
- ~~9596.~~ ORGANIC LIQUID - No change
- ~~9697.~~ ORGANIC SOLVENT - No change

- 9798. OWNER or OPERATOR - No change
- 9899. PARTICULATE MATTER - No change
- 98a99a. PM<sub>10</sub> - No change
- 98b99b. PM<sub>2.5</sub> -No change
- 99100. PERMIT (used as a verb) - No change
- ~~100~~101. PERMIT SHIELD - No change
- ~~101~~102. PERSON - No change
- ~~102~~103. PETROLEUM LIQUID - No change
- ~~103~~104. POTENTIAL TO EMIT - No change
- ~~104~~105. PRIVATE DRIVEWAY - No change
- ~~105~~106. PROCESS - No change
- ~~106~~107. PROCESS SOURCE - No change
- ~~107~~108. PROCESS WEIGHT - No change
- ~~108~~109. PROCESS WEIGHT RATE - No change
- ~~109~~110. PUBLIC OFFICER - No change
- ~~110~~111. RECONSTRUCTION - No change
- ~~111~~112. REDUCTION - No change
- ~~112~~113. REGULATED AIR POLLUTANT - Any of the following:
  - a. Any conventional air pollutant as defined in §1-3-140.33.
  - b. Nitrogen oxides and volatile organic compounds.
  - c. Any air contaminant that is subject to a standard contained in Chapter 6. of this Code or promulgated under §111 of the Clean Air Act (1990).
  - d. Any hazardous air pollutant as defined in A.R.S. §49-401.01.11. (1992) or subject to a standard promulgated under §112 of the Clean Air Act (1990) Chapter 7 Article 2 of these rules.
  - e. Any Class I or II substance listed in §602 of the Clean Air Act (1990).
- ~~113~~114. REID VAPOR PRESSURE - No change
- ~~114~~115. RIVERBED - No change
- ~~115~~116. ROAD - No change
- ~~116~~117. ROAD CONSTRUCTION - No change
- ~~117~~118. SCRAP METAL FURNACE - No change
- ~~118~~119. SECONDARY EMISSIONS - No change
- ~~119~~120. SERVICE ROAD - No change
- ~~120~~121. SHUTDOWN - No change
- ~~121~~122. SIGNIFICANT -

- a. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any one of the following rates:

<u>Pollutant</u>	<u>Emissions Rate (TPY)</u>
Carbon Monoxide	100
Nitrogen Oxides	40
Sulfur Dioxide	40
Particulate Matter	25
PM <sub>10</sub>	15
Ozone (VOC)	40
Lead	0.6
Fluorides	3
Sulfuric Acid Mist	7
Hydrogen Sulfide	10
Total Reduced Sulfur (including H <sub>2</sub> S)	10
Reduced Sulfur Compounds (including H <sub>2</sub> S)	10
Municipal Waste Combustor Organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5x10 <sup>-6</sup>
Municipal Waste Combustor Metals (measured as particulate matter)	15
Municipal Waste Combustor Acid Gases (measured as sulfur dioxide and hydrogen chloride)	40
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 (45 megagrams)

- b. In ozone nonattainment areas classified as serious or severe, significant emissions of VOC shall be determined under §3-3-240.
- c. In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under this article that is not listed in Paragraph a. of this subdivision and is not a hazardous air pollutant according to A.R.S. §49-401.01(11)-(1992) Chapter 7, Article 2 of these rules, any emission rate.

- d. Notwithstanding the emission amount listed in Paragraph a. of this subdivision, "significant" means any emission rate or any net emissions increase associated with a major stationary source or major modification subject to Chapter 3 which would be constructed within 10 km of a Class I area and have an impact on the ambient air quality of such area equal to or greater than 1 µg/m<sup>3</sup>/24-hr average.
- ~~122~~123. SMOKE - No change
  - ~~123~~124. SOURCE - No change
  - ~~124~~125. SOURCE OPERATOR - No change
  - ~~125~~126. STACK - No change
  - ~~126~~127. STACK EMISSIONS - No change
  - ~~127~~128. STAGE I VAPOR COLLECTION SYSTEM - No change
  - ~~128~~129. STAGE II VAPOR COLLECTION SYSTEM - No change
  - ~~129~~130. STANDARD CONDITIONS - No change
  - ~~130~~131. START-UP - No change
  - ~~131~~132. STATE - No change
  - ~~132~~133. STATE HAZARDOUS AIR POLLUTANT - Any air pollutant that the ADEQ Director has designated as a hazardous air pollutant pursuant to A.R.S. §49-426.04.A. (1992) and has not been deleted pursuant to A.R.S. §49-426.04.B. (1992).
  - ~~133~~134. STATIONARY SOURCE - No change
  - ~~134~~135. STATIONARY STORAGE TANK - No change
  - ~~135~~136. SUBMERGED FILL PIPE - No change
  - ~~136~~137. TRUE VAPOR PRESSURE (TVP) - No change
  - ~~137~~138. UNCLASSIFIED AREA - No change
  - ~~138~~139. UNPAVED PARKING LOT - No change
  - ~~139~~140. UNPAVED ROAD - No change
  - ~~140~~141. VAPOR - No change
  - ~~141~~142. VAPOR LOSS CONTROL DEVICE - No change
  - ~~142~~143. VAPOR PRESSURE - No change
  - ~~143~~144. VAPOR RECOVERY/DISPOSAL SYSTEM - No change
  - ~~144~~145. VAPOR TIGHT - No change
  - ~~145~~146. VISIBLE EMISSIONS - No change
  - ~~146~~147. VOLATILE ORGANIC COMPOUND (VOC) - Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions, which includes any such organic compound other than those non-precursor organic compounds listed in ~~§1-3-140.89~~ §1-3-140.90.

**3-1-030. Definitions**

For the purpose of this chapter, the following definitions shall apply:

- 1. AFFECTED SOURCE - No change
- 2. AFFECTED STATE - No change
- 3. ALTERNATIVE METHOD - No change
- 3a. BILLABLE PERMIT ACTION - No change
- 4. COMPLETE - No change
- 5. DISPERSION TECHNIQUE - No change
- 5a. EMISSIONS ALLOWABLE UNDER THE PERMIT - No change
- 6. EQUIPMENT USED IN NORMAL FARM OPERATIONS - No change
- 7. EXISTING STACK - No change
- 8. FINAL PERMIT - No change
- 8a. GASOLINE DISPENSING OPERATION - No change
- 9. GOOD ENGINEERING PRACTICE (GEP) STACK HEIGHT - No change
- 10. HIGH TERRAIN - No change
- 11. INNOVATIVE CONTROL TECHNOLOGY - No change
- 12. LOW TERRAIN - no change
- 13. LOWEST ACHIEVABLE EMISSION RATE (LAER) - No change
- 13a. MINOR SCREENING SOURCE - A source that requires a permit under Code §3-1-040, but which does not have an uncontrolled potential to emit that exceeds the significant emission rates defined in Code ~~§1-3-140.121~~ §1-3-140.122.
- 13b. NAICS - No change
- 13c. PERMIT PROCESSING TIME - No change
- 14. PORTABLE SOURCE - No change
- 15. PROPOSED PERMIT - No change
- 16. PROPOSED FINAL PERMIT - No change
- 16a. QUALIFYING GENERAL SOURCE - No change
- 17. REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) - No change
- 18. RESPONSIBLE OFFICIAL - No change
- 19. SIGNIFICANCE LEVELS - No change

- 20. SMALL SOURCE - No change
- 20a. SPRAY OPERATIONS (MEDIUM) - No change
- 20b. SPRAY OPERATIONS (SMALL) - No change
- 21. SYNTHETIC MINOR SOURCES - No change

**3-1-040. Applicability and classes of permits**

- A. No change
- B. No change
  - 1. No change
  - 2. No change
  - 3. A Class III or "minor screening" permit shall be required for:
    - a. Facilities or sources that require a permit under Code §3-1-040, but which do not have an uncontrolled potential to emit that exceeds the significant emissions rates defined in ~~§1-3-140.121~~ §1-3-140.122.
    - b. No change
  - 4. No change
- C. No change
- D. No change

**3-1-055. Completeness determination**

- A. No change
- B. A complete application is one that satisfies all of the following:
  - 1. No change
  - 2. An application for a new permit or permit revision shall contain an applicability assessment of the requirements of Article 3 of this chapter. If the applicant determines that the proposed new source is a major source as defined in §3-3-203, or the proposed permit revision constitutes a major modification as defined in ~~§1-3-140.78~~ §1-3-140.79, then the application shall comply with all applicable requirements of Article 3.
  - 3. No change
  - 4. No change
  - 5. No change
  - 6. No change

**3-1-107. Public notice and participation**

- A. No change
  - 1. No change
  - 2. No change
  - 3. No change
  - 4. No change
- B. No change
- C. No change
  - 1. No change
  - 2. No change
  - 3. No change
- D. The notice required by Subsection C of this section shall include the following:
  - 1. No change
  - 2. No change
  - 3. No change
  - 4. No change
  - 5. No change
  - 6. No change
  - 7. No change
  - 8. No change
  - 9. No change
  - 10. A summary of any notice of confidentiality filed under §3-1-120 of these rules.
  - 11. If applicable, a statement that the source has submitted a risk management analysis (RMA) under Chapter 7, Article 2 – Pinal County Hazardous Air Pollutants (HAPs) Program of these rules.
  - 12. A statement in the public record if the permit or permit revision would result in the generation of emission reduction credits under A.A.C. R-18-2-1204, or the utilization of emission reduction credits under A.A.C. R18-2-1206.
- E. No change
- F. No change
- G. No change

**ARTICLE 2. PERMIT AMENDMENTS AND REVISIONS**

**3-2-180. Facility changes allowed without permit revisions**

- A. A facility with a 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 Clean Air Act (1990) or ~~§1-3-140.78~~ §1-3-140.79.
  - 2. No change
  - 3. No change
  - 4. No change
  - 5. No change
- B. No change
- C. No change
- D. No change
- E. No change
- F. No change
- G. No change
- H. No change
- I. No change

**3-3-250. Permit and permit revision requirements for sources located in attainment and unclassifiable areas**

- A. Except as provided in Subsections B. through G. in this section and §3-3-270, Innovative Control Technology, no permit or permit revision under this article shall be issued to a person proposing to construct a new major source or make a major modification to a major source that would be constructed in an area designated as attainment or unclassifiable for any pollutant unless the source or modification meets the following conditions:
  - 1. No change
  - 2. No change
  - 3. No change
  - 4. Best available control technology (BACT) shall be determined on a case-by-case basis and may constitute application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment, clean fuels, or innovative fuel combustion techniques, for control of such pollutant. In no event shall such application of best available control technology (BACT) result in emissions of any pollutant which would exceed the emissions allowed by any applicable new source performance standard or national emission standard for hazardous air pollutants under Chapter 6, and Chapter 7 of these rules. If the Control Officer determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof may be prescribed instead to satisfy the requirement for the application of best available control technology (BACT). Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.
  - 45. The person applying for the permit or permit revision under this article performs an air impact analysis and monitoring as specified in §3-3-260 and such analysis demonstrates that allowable emission increases from the proposed new major source or major modification, in conjunction with all other applicable emission increases or reductions, including secondary emissions, for all pollutants listed in §2-5-160, and minor and mobile sources for oxides of nitrogen and PM10:
    - a. No change
    - b. No change
  - 56. Air quality models:
    - a. No change
    - b. No change
- B. No change
- C. No change
- D. No change
- E. No change
- F. No change
- G. No change
- H. No change

**3-5-530. General permit variances**

- A. No change
- B. Where MACT or HAPRACT has been established in a general permit for a source category designated pursuant to ~~A.R.S. §49-426-05(A) (supp. 1993)~~ Chapter 7, Article 2 of these rules, the owner or operator of a source within that source category may apply for a variance from the standard. To be entitled to a variance, the person seeking the variance shall first make a showing in accord with ~~A.R.S. §49-426-06.D (supp. 1993)~~ §7-2-030.6 that the imposition of MACT or HAPRACT is not necessary to avoid adverse effects to human health or adverse environmental effects.
- C. If the owner or operator makes the showing required by ~~A.R.S. §49-426-06.D (supp. 1993)~~ §7-2-030.6 and otherwise qualifies for an authorization to operate under the general permit issued by the ADEQ Director, the Control



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Officer shall, in accordance with the procedures established pursuant to this article, approve the application and authorize operation under a variance from the standard of the general permit.

- D. No change
- E. No change

**CHAPTER 7. HAZARDOUS AIR POLLUTANT STANDARDS**

**ARTICLE 2. ~~Reserved~~ PINAL COUNTY HAZARDOUS AIR POLLUTANTS (HAPs) PROGRAM**

**7-2-010. General**

- A. The purpose of this article is to establish procedures for a Pinal County program for the regulation of federally listed hazardous air pollutants (HAPs).
- B. The provisions of this article apply to:
  - 1. Minor sources of Pinal County hazardous air pollutants (HAPs) that are in one of the source categories listed in Table 1 – Pinal County HAPs Minor Source Categories of this rule; and
  - 2. Major sources of Pinal County hazardous air pollutants (HAPs).

Table 1 – Pinal County HAPs Minor Source Categories

<u>Primary SIC Code</u>	<u>Source Category</u>
<u>2434</u>	<u>Wood Kitchen Cabinets</u>
<u>2451</u>	<u>Mobile Homes</u>
<u>2621</u>	<u>Paper Mills</u>
<u>2679</u>	<u>Converted Paper Products – Not Elsewhere Classified</u>
<u>2851</u>	<u>Paints and Allied Products</u>
<u>2911</u>	<u>Petroleum Refining</u>
<u>3086</u>	<u>Plastics Foam Products</u>
<u>3088</u>	<u>Plastics Plumbing Fixtures</u>
<u>3089</u>	<u>Plastics Products – Not Elsewhere Classified</u>
<u>3241</u>	<u>Cement – Hydraulic</u>
<u>3281</u>	<u>Cut Stone and Stone Products</u>
<u>3296</u>	<u>Mineral Wool</u>
<u>3312</u>	<u>Blast Furnaces and Steel Mills</u>
<u>3331</u>	<u>Primary Copper</u>
<u>3411</u>	<u>Metal Cans</u>
<u>3444</u>	<u>Sheet Metal Work</u>
<u>3451</u>	<u>Screw Machine Products</u>
<u>3479</u>	<u>Metal Coating and Allied Services</u>
<u>3585</u>	<u>Refrigeration and Heating Equipment</u>
<u>3672</u>	<u>Printed Circuit Boards</u>
<u>3999</u>	<u>Manufacturing Industries – Not Elsewhere Classified</u>
<u>4922</u>	<u>Natural Gas Transmission</u>
<u>5169</u>	<u>Chemical and Allied Products – Not Elsewhere Classified</u>
<u>5171</u>	<u>Petroleum Bulk Stations and Terminals</u>

- C. If the Clean Air Act has established provisions including specific schedules for the regulation of source categories under Section 112(e)(5) and Section 112(n) of the Act, those provisions and schedules shall apply to the regulation of those source categories.
- D. The provisions of this article shall not apply to:
  - 1. An affected source for which a standard under 40 CFR Part 61 or 40 CFR Part 63 imposes an emissions limitation.
  - 2. An affected source at a minor source of Pinal County HAPs, if the minor source is in a source category for which a standard under 40 CFR Part 63 has been adopted and has agreed to comply with the emissions limitation under §3-1-084 or other requirements (synthetic minor) of these rules.

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3. Sources for which the Administrator has made one of the following findings under Section 112(n) of the Act (42 U.S.C. 7412(n)):
  - a. A finding that regulation is not appropriate or necessary, or
  - b. A finding that the source should apply alternative control strategies.
4. 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.

**7-2-020. Definitions**

For the purpose of this article, the following definitions shall apply:

1. 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. ACUTE AMBIENT AIR CONCENTRATION (AAAC) – That concentration of a hazardous air pollutant, in the ambient air, above which the general population, including susceptible populations, could experience acute adverse effects to human health.
3. AFFECTED SOURCE – Notwithstanding the definition of “affected source” as defined in §3-1-030, “affected source” 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), (the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the “affected source,” as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term “affected source,” as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of “affected source,” and the procedures for adopting an alternative definition of “affected source,” shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.)
4. AMBIENT AIR CONCENTRATION (AAC) – That concentration of a hazardous air pollutant in the ambient air, listed in §7-2-030.6 - Risk Management Analysis (RMA) of this rule or determined in accordance with §7-2-030.6.3.b - Risk Management Analysis (RMA) – Health Based Ambient Air Concentrations of Pinal County HAPs of this rule or §7-2-030.6.3.c - Risk Management Analysis (RMA) – Health Based Ambient Air Concentrations of Pinal County HAPS of this rule, above which the general population, including susceptible populations, could experience adverse health effects to human health.
5. ARIZONA MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (AZMACT) – An emission standard that requires the maximum degree of reduction in emissions of hazardous air pollutants subject to these rules, including a prohibition on the emissions where achievable, and that the Control Officer, according to §7-2-030.5 - Case-By-Case AZMACT Determination of this rule, has determined to be achievable by an affected source to which the standard applies, through application of measures, processes, methods, systems, or techniques, including measures that:
  1. Reduce the volume of, or eliminate emissions of, the pollutants through process changes, substitution of materials, or other modifications;
  2. Enclose systems or processes to eliminate emissions;
  3. Collect, capture, or treat the pollutants when released from a process, stack, storage, or fugitive emissions point;
  4. Are design, equipment, work practice, or operational standards, including requirements for operator training or certification; or
  5. Are a combination of 7-2-020.5(1) through 7-2-020.5(4) of this rule.
6. CHEMICAL ABSTRACT SERVICE (CAS) NUMBER – A unique, identifying number assigned by the Chemical Abstract Service to each distinct chemical substance.
7. CHRONIC ADVERSE EFFECTS TO HUMAN HEALTH – 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) – 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 POLLUTANT – Any pollutant adopted under §7-2-030.1 - Pinal County 10.HAZARDOUS AIR POLLUTANT – Any federally listed hazardous air pollutant.
11. MAJOR SOURCE OF PINAL COUNTY HAZARDOUS AIR POLLUTANTS (HAPs) means –
  1. A stationary source that emits or has the potential to emit in the aggregate, including fugitive emissions, 10 tons per year or more of any Pinal County hazardous air pollutant or 25 tons per year or more of any combination of Pinal County hazardous air pollutants.
  2. Any change to a minor source of hazardous air pollutants that would increase its emissions to the qualifying levels in §7-2-020.11.1 of this rule.
12. MINOR SOURCE OF PINAL COUNTY HAZARDOUS AIR POLLUTANTS (HAPs) – 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

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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/MODIFY –

1. A physical change in, or change in the method of operation of, a source that increases the actual emissions of any Pinal County hazardous air pollutant (HAP) emitted by the source by more than any de minimis amount listed in Table 2 – Pinal County HAPs De Minimis Levels, or which results in the emission of any HAP not previously emitted by the source by more than any de minimis amount listed in Table 2 – Pinal County HAPs De Minimis Levels.

Table 2 – Pinal County HAPs De Minimis Levels

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

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Dimethyl Sulfate	0.018	N/A
Ethyl Benzene	14	6.442
Ethyl Chloride (Chloroethane)	71	64.420
Etylene Dibromide (Dibromoethane)	N/A	0.020
Ethylene Dichloride (1,2-Dichloroethane)	N/A	0.45
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 (Perchloroethylene)	N/A	2.0
Toluene	109	146,766
Trichlorethylene	N/A	0.10
Vinyl Acetate	22	1,295

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Vinyl Chloride	N/A	1.3
Vinylidene Chloride (1,2-Dichloroethylene)	2.1	1,295
Xylene (Mixed Isomers)	98	644

2. A physical change in, or change in the method of operation of, a source that increases the actual emissions of any Pinal County HAPs emitted by the source, if it results in total source emissions that exceed one ton per year (tpy) of any individual HAP of 2.5 tpy of any combination of HAPs.
3. A physical change in, or change in the method of operation of, a source is not a modification subject to this rule, if:
  - a. The Change, together with any other changes implemented or planned by the source, qualifies for an alternative emission limitation under Section 112(i)(5) of the Act;
  - b. The Clean Air Act Section 112(d) or Section 112(f) imposes a standard requiring the change that is implemented after the Administrator promulgates the standard;
  - c. The change is routine maintenance, repair, or replacement;
  - d. The change is the use of an alternative fuel or raw material by reason of an order under Section 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. PINAL COUNTY HAZARDOUS AIR POLLUTANT (HAP) – Any federally listed hazardous air pollutant.
15. POTENTIAL TO EMIT / POTENTIAL EMISSION RATE – 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.
16. SIC CODE - 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).
17. TECHNOLOGY TRANSFER - The process by which existing control technologies that have been successfully applied in other source categories that have similar processes or emissions units are reviewed for potential use in a different source category.

**7-2-030. Standards**

1. PINAL COUNTY LIST OF HAZARDOUS AIR POLLUTANTS: The following federally listed hazardous air pollutants listed in Section 112(b)(1) of the Act (42 U.S.C. 7412(b)(1)) are hazardous air pollutants (HAPs) under this rule:

<u>CAS No.</u>	<u>HAPs</u>
<u>75070</u>	<u>Acetaldehyde</u>
<u>60355</u>	<u>Acetamide</u>
<u>75058</u>	<u>Acetonitrile</u>
<u>98862</u>	<u>Acetophenone</u>
<u>53963</u>	<u>2-Acetylaminofluorene</u>
<u>107028</u>	<u>Acrolein</u>
<u>79061</u>	<u>Acrylamide</u>
<u>79107</u>	<u>Acrylic acid</u>
<u>107131</u>	<u>Acrylonitrile</u>
<u>107051</u>	<u>Allyl chloride</u>
<u>92671</u>	<u>4-Aminobiphenyl</u>
<u>62533</u>	<u>Aniline</u>
<u>90040</u>	<u>o-Anisidine</u>
<u>1332214</u>	<u>Asbestos</u>
<u>71432</u>	<u>Benzene (Including benzene from gasoline)</u>
<u>92875</u>	<u>Benzidine</u>
<u>98077</u>	<u>Benzotrichloride</u>
<u>100447</u>	<u>Benzyl chloride</u>
<u>92524</u>	<u>Biphenyl</u>
<u>117817</u>	<u>Bis(2-ethylhexyl)phthalate (DEHP)</u>
<u>542881</u>	<u>Bis(chloromethyl)ether</u>
<u>75252</u>	<u>Bromoform</u>
<u>106990</u>	<u>1,3-Butadiene</u>
<u>156627</u>	<u>Calcium cyanamide</u>
<u>133062</u>	<u>Captan</u>

<u>63252</u>	<u>Carbaryl</u>
<u>75150</u>	<u>Carbon disulfide</u>
<u>56235</u>	<u>Carbon tetrachloride</u>
<u>463581</u>	<u>Carbonyl sulfide</u>
<u>120809</u>	<u>Catechol</u>
<u>133904</u>	<u>Chloramben</u>
<u>57749</u>	<u>Chlordane</u>
<u>7782505</u>	<u>Chlorine</u>
<u>79118</u>	<u>Chloroacetic acid</u>
<u>532274</u>	<u>2-Chloroacetophenone</u>
<u>108907</u>	<u>Chlorobenzene</u>
<u>510156</u>	<u>Chlorobenzilate</u>
<u>67663</u>	<u>Chloroform</u>
<u>107302</u>	<u>Chloromethyl methyl ether</u>
<u>126998</u>	<u>Chloroprene</u>
<u>1319773</u>	<u>Cresols/Cresylic acid (Isomers and mixture)</u>
<u>95487</u>	<u>o-Cresol</u>
<u>108394</u>	<u>m-Cresol</u>
<u>106445</u>	<u>p-Cresol</u>
<u>98828</u>	<u>Cumene</u>
<u>94757</u>	<u>2,4-D. salts and esters</u>
<u>3547044</u>	<u>DDE</u>
<u>334883</u>	<u>Diazomethane</u>
<u>132649</u>	<u>Dibenzofurans</u>
<u>96128</u>	<u>1,2-Dibromo-3-chloropropane</u>
<u>84742</u>	<u>Dibutylphthalate</u>
<u>106467</u>	<u>1,4-Dichlorobenzene(p)</u>
<u>91941</u>	<u>3,3-Dichlorobenzidine</u>
<u>111444</u>	<u>Dichloroethyl ether (Bis(2-chloroethyl)ether)</u>
<u>542756</u>	<u>1,3-Dichloropropene</u>
<u>62737</u>	<u>Dichlorvos</u>
<u>111422</u>	<u>Diethanolamine</u>
<u>121697</u>	<u>N,N-Diethylaniline (N,N-Dimethylaniline)</u>
<u>64675</u>	<u>Diethyl sulfate</u>
<u>119904</u>	<u>3,3-Dimethoxybenzidine</u>
<u>60117</u>	<u>Dimethyl aminoazobenzene</u>
<u>119937</u>	<u>3,3'-Dimethyl benzidine</u>
<u>79447</u>	<u>Dimethyl carbamoyl chloride</u>
<u>68122</u>	<u>Dimethyl formamide</u>
<u>57147</u>	<u>1,1-Dimethyl hydrazine</u>
<u>131113</u>	<u>Dimethyl phthalate</u>
<u>77781</u>	<u>Dimethyl sulfate</u>
<u>534521</u>	<u>4,6-Dinitro-o-cresol, and salts</u>
<u>51285</u>	<u>2,4-Dinitrophenol</u>
<u>121142</u>	<u>2,4-Dinitrotoluene</u>
<u>123911</u>	<u>1,4-Dioxane (1,4-Diethyleneoxide)</u>
<u>122667</u>	<u>1,2-Diphenylhydrazine</u>
<u>106898</u>	<u>Epichlorohydrin (1-Chloro-2,3-epoxypropane)</u>
<u>106887</u>	<u>1,2-Epoxybutane</u>
<u>140885</u>	<u>Ethyl acrylate</u>
<u>100414</u>	<u>Ethyl benzene</u>
<u>51796</u>	<u>Ethyl carbamate (Urethane)</u>
<u>75003</u>	<u>Ethyl chloride (Chloroethane)</u>
<u>106934</u>	<u>Ethylene dibromide (Dibromoethane)</u>
<u>107062</u>	<u>Ethylene dichloride (1,2-Dichloroethane)</u>
<u>107211</u>	<u>Ethylene glycol</u>
<u>151564</u>	<u>Ethylene imine (Aziridine)</u>
<u>75218</u>	<u>Ethylene oxide</u>
<u>96457</u>	<u>Ethylene thiourea</u>
<u>75343</u>	<u>Ethylidene dichloride (1,1-Dichloroethane)</u>
<u>50000</u>	<u>Formaldehyde</u>
<u>76448</u>	<u>Heptachlor</u>
<u>118741</u>	<u>Hexachlorobenzene</u>
<u>87683</u>	<u>Hexachlorobutadiene</u>
<u>77474</u>	<u>Hexachlorocyclopentadiene</u>

<u>67721</u>	<u>Hexachloroethane</u>
<u>822060</u>	<u>Hexamethylene-1,6-diisocyanate</u>
<u>680319</u>	<u>Hexamethylphosphoramide</u>
<u>110543</u>	<u>Hexane</u>
<u>302012</u>	<u>Hydrazine</u>
<u>7647010</u>	<u>Hydrochloric acid</u>
<u>7664393</u>	<u>Hydrogen fluoride (Hydrofluoric acid)</u>
<u>123319</u>	<u>Hydroquinone</u>
<u>78591</u>	<u>Isophorone</u>
<u>58899</u>	<u>Lindane (All isomers)</u>
<u>108316</u>	<u>Maleic anhydride</u>
<u>67561</u>	<u>Methanol</u>
<u>72435</u>	<u>Methoxychlor</u>
<u>74839</u>	<u>Methyl bromide (Bromomethane)</u>
<u>74873</u>	<u>Methyl chloride (Chloromethane)</u>
<u>71556</u>	<u>Methyl chloroform (1,1,1-Trichloroethane)</u>
<u>60344</u>	<u>Methyl hydrazine</u>
<u>74884</u>	<u>Methyl iodine (Iodomethane)</u>
<u>108101</u>	<u>Methyl isobutyl ketone (Hexone)</u>
<u>624839</u>	<u>Methyl isocyanate</u>
<u>80626</u>	<u>Methyl methacrylate</u>
<u>1634044</u>	<u>Methyl tert butyl ether</u>
<u>101144</u>	<u>4,4-Methylene bis(2-chloroaniline)</u>
<u>75092</u>	<u>Methylene chloride (Dichloromethane)</u>
<u>101688</u>	<u>Methylene diphenyl diisocyanate (MDI)</u>
<u>101779</u>	<u>4,4'-Methylenedianiline</u>
<u>91203</u>	<u>Naphthalene</u>
<u>98953</u>	<u>Nitrobenzene</u>
<u>92933</u>	<u>4-Nitrobiphenyl</u>
<u>100027</u>	<u>4-Nitrophenol</u>
<u>79469</u>	<u>2-Nitropropane</u>
<u>684935</u>	<u>N-Nitroso-N-methylurea</u>
<u>62759</u>	<u>N-Nitrosodimethylamine</u>
<u>59892</u>	<u>N-Nitrosomorpholine</u>
<u>56382</u>	<u>Parathion</u>
<u>82688</u>	<u>Pentachloronitrobenzene (Quintobenzene)</u>
<u>87865</u>	<u>Pentachlorophenol</u>
<u>108952</u>	<u>Phenol</u>
<u>106503</u>	<u>p-Phenylenediamine</u>
<u>75445</u>	<u>Phosgene</u>
<u>7803512</u>	<u>Phosphine</u>
<u>7723140</u>	<u>Phosphorus</u>
<u>85449</u>	<u>Phthalic anhydride</u>
<u>1336363</u>	<u>Polychlorinated biphenyls (Aroclors)</u>
<u>1120714</u>	<u>1,3-Propane sultone</u>
<u>57578</u>	<u>beta-Propiolactone</u>
<u>123386</u>	<u>Propionaldehyde</u>
<u>114261</u>	<u>Propoxur (Baygon)</u>
<u>78875</u>	<u>Propylene dichloride (1,2-Dichloropropane)</u>
<u>75569</u>	<u>Propylene oxide</u>
<u>75558</u>	<u>1,2-Propylenimine (2-Methyl aziridine)</u>
<u>91225</u>	<u>Quinoline</u>
<u>106514</u>	<u>Quinone</u>
<u>100425</u>	<u>Styrene</u>
<u>96093</u>	<u>Styrene oxide</u>
<u>1746016</u>	<u>2,3,7,8-Tetrachlorodibenzo-p-dioxin</u>
<u>79345</u>	<u>1,1,2,2-Tetrachloroethane</u>
<u>127184</u>	<u>Tetrachloroethylene (Perchloroethylene)</u>
<u>7550450</u>	<u>Titanium tetrachloride</u>
<u>108883</u>	<u>Toluene</u>
<u>95807</u>	<u>2,4-Toluene diamine</u>
<u>584849</u>	<u>2,4-Toluene diisocyanate</u>
<u>95534</u>	<u>o-Toluidine</u>
<u>8001352</u>	<u>Toxaphene (Chlorinated camphene)</u>
<u>120821</u>	<u>1,2,4-Trichlorobenzene</u>

<u>79005</u>	<u>1,1,2-Trichloroethane</u>
<u>79016</u>	<u>Trichloroethylene</u>
<u>95954</u>	<u>2,4,5-Trichlorophenol</u>
<u>88062</u>	<u>2,4,6-Trichlorophenol</u>
<u>121448</u>	<u>Triethylamine</u>
<u>1582098</u>	<u>Trifluralin</u>
<u>540841</u>	<u>2,2,4-Trimethylpentane</u>
<u>108054</u>	<u>Vinyl acetate</u>
<u>593602</u>	<u>Vinyl bromide</u>
<u>75014</u>	<u>Vinyl chloride</u>
<u>75354</u>	<u>Vinylidene chloride (1,1-Dichloroethylene)</u>
<u>1330207</u>	<u>Xylenes (Isomers and mixture)</u>
<u>95476</u>	<u>o-Xylenes</u>
<u>108383</u>	<u>m-Xylenes</u>
<u>106423</u>	<u>p-Xylenes</u>

Antimony Compounds

Arsenic Compounds (Inorganic including arsine)

Beryllium Compounds

Cadmium Compounds

Chromium Compounds

Cobalt Compounds

Coke Oven Emissions

Cyanide Compounds

X'CN where X = H' or any other group where a formal dissociation may occur. For example, KCN or Ca(CN)<sub>2</sub>

Glycol Ethers

a. Glycol ethers include mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR' where:

(1) n = 1, 2, or 3;

(2) R = alkyl C7 or less; or

(3) R = phenyl or alkyl substituted phenyl;

(4) R' = H or alkyl C7 or less; or

(5) OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate

b. Glycol ethers does not include ethylene glycol monobutyl ether

Lead Compounds

Manganese Compounds

Mercury Compounds

Fine Mineral Fibers (Including mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag or other mineral-derived fibers of average diameter 1 micrometer or less)

Nickel Compounds

Polycyclic Organic Matter (Including organic compounds with more than one benzene ring and which have a boiling point greater than or equal to 100°C)

Radionuclides (Including radon. Radionuclide is a type of atom which spontaneously undergoes radioactive decay)

Selenium Compounds

2. NOTICE OF TYPES AND AMOUNTS OF HAPS: An owner and/or operator of a source subject to this rule 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 and/or operator to conduct performance tests, sampling, or monitoring in order to fulfill the requirements of this section of this rule.

3. MODIFICATIONS;PERMITS;PERMIT REVISIONS:

1. Any person who constructs or modifies a source that is subject to this rule must first obtain a permit or significant permit revision that complies with chapter 3 of these rules and §7-2-030.3.2 of this rule or §7-2-030.3.3 of this rule

2. A permit or significant permit revision that the Control Officer issues to a new or modified minor source of Pinal County hazardous air pollutants (HAPs) that is in one of the source categories listed in Table 1-Pinal County HAPs Minor Source Categories of this rule shall impose HAPRACT under §7-2-030.4 of this rule, unless the applicant demonstrates, with a risk management analysis (RMA) under §7-2-030.6 of this rule, that the imposition of HAPRACT is not necessary to avoid adverse effects to human health or adverse environmental effects.

3. A permit or significant permit revision that the Control Officer issues to a new or modified major source of Pinal County hazardous air pollutants (HAPs) shall impose AZMACT under §7-2-030.5 of this rule, unless the applicant demonstrates, with a risk management analysis (RMA) under §7-2-030.6 of this rule, that the imposition of AZMACT is not necessary to avoid adverse effects to human health or adverse environmental effects.



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4. If the Control Officer establishes a general permit establishing HAPRACT according to Chapter 3, Article 5, the following apply:
    - a. The owner and/or operator of a source covered by that general permit may obtain a variance from HAPRACT by complying with a risk management analysis (RMA) under §7-2-030.6 of this rule when the source applies for the general permit;
    - b. If the owner and/or operator makes the applicable demonstration required by a risk management analysis (RMA) under §7-2-030.6 of this rule and otherwise qualifies for the general permit, the Control Officer shall approve the application according to A.R.S. §49-480-County Air Pollution Control-Permits; Fees and issue an authorization-to-operate granting a variance from the specific provisions of the general permit relating to HAPRACT; and
    - c. Except as modified by a variance, the general permit governs the source.
  5. When determining whether HAP emissions from a new source or modification exceed the thresholds prescribed in §7-2-020.11-Definition Of Major Source Of Pinal County Hazardous Air Pollutants (HAPs) of this rule and §7-2-020.12-Minor Source Of Pinal County Hazardous Air Pollutants (HAPs) of this rule or a de minimis amount described in Table 2-Pinal County HAPs De Minimis Levels in §7-2-020.13.1 of this rule, 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, earthmoving, crushing, grinding, or traffic over paved or unpaved roads, or other similar activities.
  6. In addition to the requirements of Appendix A-Standard Permit Application Form And Filing Instructions of these rules, an application for a permit or a permit revision required under this section of this rule shall include one of the following:
    - a. The applicant's proposal and documentation for HAPRACT under §7-2-030.4 of this rule;
    - b. The applicant's proposal and documentation for AZMACT under §7-2-030.5 of this rule; or
    - c. A risk management analysis (RMA) submitted under §7-2-030.6 of this rule.
  7. Any applicant for a permit or a permit revision under this rule may request accelerated permit processing under §3-7-630.
4. CASE-BY-CASE HAPRACT DETERMINATION:
1. 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-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and of this section of this rule.
  2. An applicant subject to §7-2-030.3.2 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:
    - a. The applicant shall identify the range of applicable control technologies, including:
      - i. A survey of similar emission sources to determine the emission limitations currently achieved in practice in the United States;
      - ii. Controls applied to similar source categories, emissions units, or gas streams through technology transfer; and
      - iii. Innovative technologies that are demonstrated to be reliable, that reduce emissions for 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-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule.
    - b. The applicant shall propose as HAPRACT one of the control technologies identified under §7-2-030.4.2(a)-Case-By-Case HAPRACT Determination of this rule and shall provide:
      - i. The rationale for selecting the specific control technologies from the range identified in §7-2-030.4.2(a) -Case-By-Case HAPRACT Determination;
      - ii. Estimated control efficiency, described as percent HAP removed;
      - iii. Expected emission rates in tons per year and pounds per hour;
      - iv. Expected emission reduction in tons per year and pounds per hour;
      - v. Economic impacts and cost effectiveness of implementing the proposed control technology;
      - vi. Other environmental impacts of the proposed control technology; and
      - vii. Energy impact of the proposed technology.
    - c. The applicant shall identify rejected control technologies identified in §7-2-030.4.2(a)-Case-By-Case HAPRACT Determination of this rule and shall provide for each rejected control technology:
      - i. The rationale for rejecting the specific control technologies identified in §7-2-030.4.2(a)-Case-By-Case HAPRACT Determination of this rule;
      - ii. Estimated control efficiency described as percent HAP removed;
      - iii. Expected emission rate in tons per year and pounds per hour;
      - iv. Expected emission reduction in tons per year and pounds per hour;
      - v. Economic impact and cost effectiveness of implementing the rejected control technologies;
      - vi. Other environmental impact of the rejected control technology; and
      - vii. Energy impact of the rejected control technologies.
  3. The Control Officer shall determine whether the applicant's HAPRACT selection complies with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this

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section of this rule based on the documentation provided in §7-2-030.4.2-Case-By-Case HAPRACT Determination of this rule:

- a. If the Control Officer finds that the applicant's proposal complies with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall include the applicant's proposed HAPRACT selection in the permit or permit revision.
  - b. If the Control Officer finds that the applicant's proposal fails to comply with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall:
    - i. Notify the applicant that the proposal failed to meet requirements;
    - ii. Specify the deficiencies in the proposal; and
    - iii. State that the applicant shall submit a new HAPRACT proposal according to the provisions regarding permit application processing procedures in Chapter 3 of these rules.
  - c. If the applicant does not submit a new proposal, the Control Officer shall deny the application for a permit or permit revision.
  - d. If the Control Officer finds that the new proposal fails to comply with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall deny the application for a permit or permit revision.
4. 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.
5. The Control Officer shall not impose a control technology that would require the application of measures that are incompatible with measures required under Chapter 7 Article 1 - Federal Hazardous Air Pollutant Program of these rules or 40 CFR Part 63-National Emission Standards For Hazardous Air Pollutants For Source Categories. 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.
5. CASE-BY-CASE AZMACT DETERMINATION:
1. 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-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and of this section of this rule.
  2. An applicant subject to §7-2-030.3.3 -Modifications; Permits; Permit Revisions of this rule 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:
    - a. The applicant shall identify all available control options, taking into consideration the measures cited in §7-2-020.5-Definition Of Arizona Maximum Achievable Control Technology (AZMACT) of this rule. The analysis shall include a survey of emission sources to determine the most stringent emission limitation currently achieved in practice in the United States. The survey may include technologies employed outside of the United States and may include controls applied through technology transfer to similar source categories and gas streams.
    - b. 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.
    - c. 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:
      - i. Estimated control efficiency described by percent of HAP removed;
      - ii. Expected emission rate in tons per year and pounds per hour;
      - iii. Expected emission reduction in tons per year and pounds per hour;
      - iv. Economic impact and cost effectiveness;
      - v. Other environmental impact; and
      - vii. Energy impact.
    - d. The applicant shall evaluate the most effective controls, listed according to §7-2-030.5.2.c-Case-By-Case AZMACT Determination of this rule and document the results as follows:
      - i. For new major sources, the applicant shall consider the factors described in §7-2-030.5.2.c-Case-By-Case AZMACT Determination of this rule to arrive at the final control technology proposed as AZMACT.
        - a. 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.
        - b. 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

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- 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.
- ii. For a modification, the applicant shall evaluate the control technologies according to §7-2-030.5.2.d(1) -Case-By-Case AZMACT Determination of this rule. 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:
    - a. 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
    - b. 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.
  - e. The applicant shall propose as AZMACT for the HAP under review:
    - i. The most effective control technology or methodology not eliminated in the evaluation described in §7-2-030.5.2(d) -Case-By-Case AZMACT Determination of this rule; or
    - ii. An innovative technology that reduces emissions to the extent achieved by the control technology that the applicant otherwise would have proposed under §7-2-030.5.2(e)(1) -Case-By-Case AZMACT Determination of this rule and that meets all the requirements of A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule.
  3. 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 Part 60 or national emission standard for hazardous air pollutants (NESHAP) at 40 CFR Part 61.
  4. The Control Officer shall determine whether the applicant's AZMACT proposal complies with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule.
    - a. If the Control Officer determines that the applicant's proposal complies with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall include the applicant's proposed AZMACT selection in the permit or permit revision.
    - b. If the Control Officer determines that the applicant's proposal does not comply with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall:
      - i. Notify the applicant that the proposal does not meet the requirements;
      - ii. Specify the deficiencies; and
      - iii. State that the applicant shall submit a new AZMACT proposal according to permit application processing procedures in Chapter 3 of these rules.
        - a. If the applicant does not submit a new proposal, the Control Officer may deny the application for permit or permit revision.
        - b. If the Control Officer determines that the new proposal fails to comply with A.R.S. §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this section of this rule, the Control Officer shall deny the application for a permit or permit revision.
  5. 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 standards, or combination of these, to be included in the applicant's permit, but shall not impose a numeric emissions limitation.
  6. The Control Officer shall not impose a control technology that would require the application of measures that are incompatible with measures required under Chapter 7 Article 1- Federal Hazardous Air Pollutant Program of these rules or 40 CFR Part 63-National Emission Standards For Hazardous Air Pollutants For Source Categories. 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.
  6. **RISK MANAGEMENT ANALYSIS (RMA):**
    1. **Applicability:**
      - a. An applicant seeking to demonstrate that HAPRACT or AZMACT is not necessary to prevent adverse effects to human health or the environment by conducting a risk management analysis (RMA) shall first apply for a permit or a significant permit revision that complies with Chapter 3 of these rules.
      - b. 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 of this rule.
      - c. The risk management analysis (RMA) for a new source shall apply to:
        - i. The source's annual total potential to emit Pinal County HAPs for evaluation of chronic exposure; or
        - ii. The source's hourly total potential to emit Pinal County HAPs for evaluation of acute exposure.
      - d. The risk management analysis (RMA) for a modified source shall apply to:
        - i. The source's annual total potential to emit Pinal County HAPs, after the modification, for evaluation of chronic exposure; or

- ii. The source's hourly total potential to emit Pinal County HAPs, after the modification, for evaluation of acute exposure.
- e. An applicant shall conduct a risk management analysis (RMA) for each Pinal County HAP emitted by the source in greater than de minimis amounts.
- 2. The applicant may use any of the following methods for conducting a risk management analysis (RMA):
  - a. Tier 1-Equation:
    - i. For emissions of a HAP included in a listed group of hazardous compounds, other than those HAPs identified in Table 3-Acute And Chronic Ambient Air Concentrations of this rule as selected compounds, the applicant shall determine a health-based ambient air concentration, under §7-2-030.6.3(c)-Risk Management Analysis (RMA)-Health Based Ambient Air Concentrations Of Pinal County HAPs of this rule.
    - ii. 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:
      - a. MHE = maximum hourly exposure in milligrams per cubic meter, and
      - b. PPH = hourly potential to emit the HAP in pounds per hour.
    - iii. 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:
      - a. MAE = maximum annual exposure in milligrams per cubic meter,
      - b. PPY = annual potential to emit the HAP in pounds per year, and
      - c. MOH = maximum operating hours for the source, taking into account any enforceable operational limitations.
    - iv. The Control Officer shall not require compliance with HAPRACT for the HAP under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or with AZMACT for the HAP under §7-2-030.5-Case-By-Case AZMACT Determination of this rule, if both of the following are true:
      - a. The maximum hourly concentration determined under §7-2-030.6.2(a)(2)-Risk Management Analysis (RMA)-Tier 1-Equation of this rule is less than the acute ambient air concentrations determined under §7-2-030.6.3(c)-Risk Management Analysis (RMA)-Health Based Ambient Air Concentrations Of Pinal County HAPs of this rule; and
      - b. The maximum annual concentration determined under §7-2-030.6.2(a)(3)-Risk Management Analysis (RMA)-Tier 1-Equation of this rule is less than the chronic ambient air concentrations determined under §7-2-030.6.3(c)-Risk Management Analysis (RMA) -Health Based Ambient Air Concentrations Of Pinal County HAPs of this rule.
    - v. If either the maximum hourly concentration determined under §7-2-030.6.2(a)(2)-Risk Management Analysis (RMA)-Tier 1-Equation of this rule or the maximum annual concentration determined under §7-2-030.6.2(a)(3)-Risk Management Analysis (RMA)-Tier 1-Equation is greater than or equal to the relevant ambient air concentration:
      - a. The Control Officer shall require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or with AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule; or
      - b. The applicant may use the Tier 2-SCREEN model method under §7-2-030.6(2)(b) of this rule, the Tier 3-Modified SCREEN Model method under §7-2-030.6(2)(c) of this rule, or the Tier 4-Modified SCREEN Model or Refined Air Quality Model method under §7-2-030.6(2)(d) of this rule for conducting a risk management analysis (RMA) under §7-2-030.6-Risk Management Analysis (RMA) of this rule.
  - b. Tier 2-SCREEN Model:
    - i. The applicant shall use the SCREEN model performed in a manner consistent with the Guideline specified in Chapter 3, Article 3-Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources, §3-3-250-Permit Requirements For Sources Located In Attainment And Unclassifiable Areas-Air Quality Models of these rules. The applicant shall compare the maximum concentration that is predicted in the ambient air with the relevant ambient air concentration determined under §7-2-030.6.3-Risk Management Analysis (RMA)-Health Based Ambient Air Concentrations Of Pinal County HAPs of this rule.
    - ii. If the predicted maximum concentration is less than the relevant ambient air concentration, the Control Officer shall not require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule.
    - iii. If the predicted maximum concentration is greater than or equal to the relevant ambient air concentration:
      - a. The Control Officer shall require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule; or
      - b. The applicant may use the Tier 3-Modified SCREEN Model method under §7-2-030.6(2)(c) of this rule or the Tier 4-Modified SCREEN Model or Refined Air Quality Model method under §7-2-

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- 030.6(2)(d) of this rule for determining maximum public exposure to Pinal County HAPs under §7-2-030.6(2)(c)-Risk Management Analysis (RMA)-Tier 3-Modified SCREEN Model of this rule.
- c. Tier 3-Modified SCREEN Model:
- i. The applicant shall use the SCREEN model performed in a manner consistent with the Guideline specified in Chapter 3, Article 3-Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources, §3-3-250-Permit Requirements For Sources Located In Attainment And Unclassifiable Areas-Air Quality Models of these rules.
  - ii. For evaluation of acute exposure, the applicant shall assume exposure in the ambient air.
  - iii. For evaluation of chronic exposure:
    - a. The applicant may use exposure assumptions consistent with institutional or engineering controls that are permanent and enforceable outside the permit.
    - b. 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 §7-2-030.6(2)(c)(3)-Risk Management Analysis (RMA)-Tier 3- Modified SCREEN Model of this rule to determine maximum public exposure to the Pinal County HAP.
  - iv. If the predicted maximum concentration is less than the relevant ambient air concentration, the Control Officer shall not require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule.
  - v. If the predicted maximum concentration is greater than or equal to the relevant ambient air concentration:
    - a. The Control Officer shall require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule; or
    - b. The applicant may use the Tier 4-Modified SCREEN Model or Refined Air Quality Model method under §7-2-030.6(2)(d) of this rule for determining maximum public exposure to Pinal County HAPs, under §7-2-030.6(2)(d) of this rule.
- d. Tier 4-Modified SCREEN Model or Refined Air Quality Model:
- i. The applicant shall employ either the SCREEN model or a refined air quality model performed in a manner consistent with the Guideline specified in Chapter 3, Article 3-Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources, §3-3-250-Permit Requirements For Sources Located In Attainment And Unclassifiable Areas-Air Quality Models of these rules.
  - ii. For evaluation of acute exposure, the applicant shall assume exposure in the ambient air.
  - iii. For evaluation of chronic exposure:
    - a. The applicant may use exposure assumptions consistent with institutional or engineering controls that are permanent and enforceable outside the permit.
    - b. The applicant shall notify the Control Officer of these controls. If the Control Officer does not approve of the proposed controls or if the proposed controls are not permanent and enforceable outside of the permit, the applicant shall assume chronic exposure in the ambient air.
  - iv. The applicant may include in the Tier 4 risk management analysis (RMA) documentation of the following factors:
    - a. The estimated actual exposure to the HAP of persons living in the airshed of the source;
    - b. Available epidemiological or other health studies;
    - c. Risks presented by background concentrations of hazardous air pollutants;
    - d. Uncertainties in risk assessment methodology or other health assessment techniques;
    - e. Health or environmental consequences from efforts to reduce the risk; or
    - f. The technological and commercial availability of control methods beyond those otherwise required for the source and the cost of such methods.
  - v. The applicant shall submit a written protocol for conducting a risk management analysis (RMA), consistent with the requirements of §7-2-030.6(2)(d)-Risk Management Analysis (RMA)-Tier 4-Modified SCREEN Model or Refined Air Quality Model of this rule, to the Control Officer for the Control Officer's approval. If the Control Officer does not approve the written protocol, the applicant may:
    - a. Submit a revised protocol to the Control Officer;
    - b. Propose HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5 - Case-By-Case AZMACT Determination of this rule; or
    - c. Refuse to submit a revised protocol, in which case the Control Officer shall deny the application.
  - vi. If the predicted maximum concentration is less than the relevant ambient air concentration or if warranted under the factors listed in §7-2-030.6(2)(d)(4)-Risk Management Analysis (RMA)-Tier 4-Modified SCREEN Model or Refined Air Quality Model of this rule, the Control Officer shall not require compliance with HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule.

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- vii. Except as provided in §7-2-030.6(2)(d)(6)-Risk Management Analysis (RMA)- Tier 4-Modified SCREEN Model or Refined Air Quality Model of this rule, 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 §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule.
3. Health Based Ambient Air Concentrations Of Pinal County HAPs:
- a. For Pinal County HAPs for which the Control Officer has already determined an ambient air concentration, the applicant shall use the acute and chronic values listed in Table 3-Acute And Chronic Ambient Air Concentrations of this rule.

Table 3 – Acute and Chronic Ambient Air Concentrations

<u>Chemical</u>	<u>Acute Ambient Air Concentrations (ug/m<sup>3</sup>)</u>	<u>Chronic Ambient Air Concentrations (ug/m<sup>3</sup>)</u>
<u>1,1,1-Trichloroethane (Methyl Chloroform)</u>	<u>2,075</u>	<u>2.30E+00</u>
<u>1,1,2,2-Tetrachloroethane</u>	<u>18</u>	<u>3.27E-05</u>
<u>1,3-Butadiene</u>	<u>7,514</u>	<u>6.32E-05</u>
<u>1,4-Dichlorobenzene</u>	<u>300</u>	<u>3.06E-04</u>
<u>2,2,4-Trimethylpentane</u>	<u>900</u>	<u>N/A</u>
<u>2,4-Dinitrotoluene</u>	<u>5.0</u>	<u>2.13E-05</u>
<u>2-Chloroacetophenone</u>	<u>N/A</u>	<u>3.13E-05</u>
<u>Acetaldehyde</u>	<u>306</u>	<u>8.62E-04</u>
<u>Acetophenone</u>	<u>25</u>	<u>3.65E-01</u>
<u>Acrolein</u>	<u>0.23</u>	<u>2.09E-05</u>
<u>Acrylonitrile</u>	<u>38</u>	<u>2.79E-05</u>
<u>Antimony Compounds (Selected Compound: Antimony)</u>	<u>13</u>	<u>1.46E-03</u>
<u>Arsenic Compounds (Selected Compound: Arsenic)</u>	<u>2.5</u>	<u>4.41E-07</u>
<u>Benzene</u>	<u>1,276</u>	<u>2.43E-04</u>
<u>Benzyl Chloride</u>	<u>26</u>	<u>3.96E-05</u>
<u>Beryllium Compounds (Selected Compound: Beryllium)</u>	<u>0.013</u>	<u>7.90E-07</u>
<u>Biphenyl</u>	<u>38</u>	<u>1.83E-01</u>
<u>bis (2-Ethylhexy) Phthalate</u>	<u>13</u>	<u>4.80E-04</u>
<u>Bromoform</u>	<u>7.5</u>	<u>1.72E-03</u>
<u>Cadmium Compounds (Selected Compound: Cadmium)</u>	<u>0.25</u>	<u>1.05E-06</u>
<u>Carbon Disulfide</u>	<u>311</u>	<u>7.30E-01</u>
<u>Carbon Tetrachloride</u>	<u>201</u>	<u>1.26E-04</u>
<u>Carbonyl Sulfide</u>	<u>30</u>	<u>N/A</u>
<u>Chlorobenzene</u>	<u>1,000</u>	<u>1.04E+00</u>
<u>Chloroform</u>	<u>195</u>	<u>3.58E-04</u>
<u>Chromium Compounds (Selected Compound: Hexavalent Chromium)</u>	<u>0.10</u>	<u>1.58E-07</u>
<u>Cobalt Compounds (Selected Compound: Cobalt)</u>	<u>10</u>	<u>6.86E-07</u>

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<u>Cumene</u>	<u>935</u>	<u>4.17E-01</u>
<u>Cyanide Compounds (Selected Compound: Hydrogen Cyanide)</u>	<u>3.9</u>	<u>3.13E-03</u>
<u>Dibenzofurans</u>	<u>25</u>	<u>7.30E-03</u>
<u>Dichloromethane (Methylene Chloride)</u>	<u>347</u>	<u>4.03E-03</u>
<u>Dimethyl Formamide</u>	<u>164</u>	<u>3.13E-02</u>
<u>Dimethyl Sulfate</u>	<u>0.31</u>	<u>N/A</u>
<u>Ethyl Benzene</u>	<u>250</u>	<u>1.04E+00</u>
<u>Ethyl Chloride (Chloroethane)</u>	<u>1,250</u>	<u>1.04E+01</u>
<u>Ethylene Dibromide (Dibromoethane)</u>	<u>100</u>	<u>3.16E-06</u>
<u>Ethylene Dichloride (1,2-Dichloroethane)</u>	<u>405</u>	<u>7.29E-05</u>
<u>Ethylene Glycol</u>	<u>50</u>	<u>4.17E-01</u>
<u>Ethylidene Dichloride (1,1-Dichloroethane)</u>	<u>6,250</u>	<u>5.21E-01</u>
<u>Formaldehyde</u>	<u>17</u>	<u>1.46E-04</u>
<u>Glycol Ethers (Selected Compound: Diethylene Glycol, Monoethyl Ether)</u>	<u>250</u>	<u>3.14E-03</u>
<u>Hexachlorobenzene</u>	<u>0.50</u>	<u>4.12E-06</u>
<u>Hexane</u>	<u>11,649</u>	<u>2.21E+00</u>
<u>Hydrochloric Acid</u>	<u>16</u>	<u>2.09E-02</u>
<u>Hydrogen Fluoride (Hydrofluoric Acid)</u>	<u>9.8</u>	<u>1.46E-02</u>
<u>Isophorone</u>	<u>13</u>	<u>2.09E+00</u>
<u>Manganese Compounds (Selected Compound: Manganese)</u>	<u>2.5</u>	<u>5.21E-05</u>
<u>Mercury Compounds (Selected Compound: Elemental Mercury)</u>	<u>1.0</u>	<u>3.13E-04</u>
<u>Methanol</u>	<u>943</u>	<u>4.17E+00</u>
<u>Methyl Bromide</u>	<u>261</u>	<u>5.21E-03</u>
<u>Methyl Chloride</u>	<u>1,180</u>	<u>9.39E-02</u>
<u>Methyl Hydrazine</u>	<u>0.43</u>	<u>3.96E-07</u>
<u>Methyl Isobutyl Ketone (Hexone)</u>	<u>500</u>	<u>3.13E+00</u>
<u>Methyl Methacrylate</u>	<u>311</u>	<u>7.30E-01</u>
<u>Methyl Tert-Butyl Ether</u>	<u>1,444</u>	<u>7.40E-03</u>
<u>N, N-Dimethylaniline</u>	<u>25</u>	<u>7.30E-03</u>
<u>Naphthalene</u>	<u>75</u>	<u>5.58E-05</u>
<u>Nickel Compounds (Selected Compound: Nickel Refinery Dust)</u>	<u>5.0</u>	<u>7.90E-06</u>
<u>Phenol</u>	<u>58</u>	<u>2.09E-01</u>

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<u>Polychlorinated Biphenyls (Selected Compound: Aroclor 1254)</u>	<u>2.5</u>	<u>1.90E-05</u>
<u>Polycyclic Organic Matter (Selected Compound: Benzo(a)pyrene)</u>	<u>5.0</u>	<u>2.02E-06</u>
<u>Propionaldehyde</u>	<u>403</u>	<u>8.62E-04</u>
<u>Propylene Dichloride</u>	<u>250</u>	<u>4.17E-03</u>
<u>Selenium Compounds (Selected Compound: Selenium)</u>	<u>0.50</u>	<u>1.83E-02</u>
<u>Styrene</u>	<u>554</u>	<u>1.04E+00</u>
<u>Tetrachloroethylene (Perchloroethylene)</u>	<u>814</u>	<u>3.20E-04</u>
<u>Toluene</u>	<u>1,923</u>	<u>5.21E+00</u>
<u>Trichloroethylene</u>	<u>1,450</u>	<u>1.68E-05</u>
<u>Vinyl Acetate</u>	<u>387</u>	<u>2.09E-01</u>
<u>Vinyl Chloride</u>	<u>2,099</u>	<u>2.15E-04</u>
<u>Vinylidene Chloride (1,2- Dichloroethylene)</u>	<u>38</u>	<u>2.09E-01</u>
<u>Xylene (Mixed Isomers)</u>	<u>1,736</u>	<u>1.04E-01</u>

- b. For Pinal County HAPs for which an ambient air concentration has not already been determined, the applicant shall determine the acute and chronic ambient air concentrations according to the process in Appendix L-Procedures For Determining Ambient Air Concentrations For Hazardous Air Pollutants of these rules.
- c. For specific compounds included in Pinal County HAPs listed as a group (e.g., arsenic compounds), the applicant may use an ambient air concentration developed according to the process in Appendix L-Procedures For Determining Ambient Air Concentrations For Hazardous Air Pollutants of these rules.
4. As part of the risk management analysis (RMA), an applicant may voluntarily propose emissions limitations under §3-1-084 of these rules, in order to avoid being subject to HAPRACT under §7-2-030.4-Case-By-Case HAPRACT Determination of this rule or to avoid being subject to AZMACT under §7-2-030.5-Case-By-Case AZMACT Determination of this rule.
5. Documentation Of Risk Management Analysis (RMA): The applicant shall document each risk management analysis (RMA) performed for each Pinal County HAP and shall include the following information:
  - a. The potential maximum public exposure of the Pinal County HAP;
  - b. The method used to determine the potential maximum public exposure:
    - i. For Tier 1-Equation, the calculation demonstrating that the emissions of the Pinal County HAP are less than the health-based ambient air concentration, determined under §7-2-030.6(3)(c)-Risk Management Analysis (RMA)-Health Based Ambient Air Concentrations Of Pinal County HAPs of this rule.
    - ii. For Tier 2-SCREEN Model, the input files to and the results of the SCREEN Modeling.
    - iii. For Tier 3-Modified SCREEN Model:
      - a. The input files to and the results of the SCREEN Modeling; and
      - b. The permanent and enforceable institutional or engineering controls approved by the Control Officer under §7-2-030.6(2)(c)(3)-Risk Management Analysis (RMA)-Tier 3-Modified SCREEN Model of this rule.
    - iv. For Tier 4-Modified SCREEN Model or Refined Air Quality Model:
      - a. The model the applicant used;
      - b. The input files to and the results of the modeling;
      - c. The modeling protocol approved by the Control Officer under §7-2-030.6(2)(d)(3)-Risk Management Analysis (RMA)-Tier 4- Modified SCREEN Model or Refined Air Quality Model of this rule; and
      - d. The permanent and enforceable institutional or engineering controls approved by the Control Officer under §7-2-030.6(2)(d)(5)-Risk Management Analysis (RMA)-Tier 4-Modified SCREEN Model or Refined Air Quality Model of this rule;
  - c. The health-based ambient air concentrations determined under §7-2-030.6(3)-Risk Management Analysis (RMA)-Health Based Ambient Air Concentrations of Pinal County HAPs of this rule; and
  - d. Any voluntary emissions limitations that the applicant proposes under §7-2-030.6(4)-Risk Management Analysis (RMA) of this rule.



6. An applicant may conduct a risk management analysis (RMA) for any alternative operating scenario, requested in the application, consistent with the requirements of §7-2-030.6(6)-Risk Management Analysis (RMA) of this rule. The alternative operating scenario may allow a range of operating conditions if the Control Officer concludes that the risk management analysis (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 rule.

**7-2-040. Administrative Requirements**

1. EFFECTIVE DATE: The provisions of this rule shall be effective July 1, 2007 and shall not apply to permits or significant permit revisions for which the Control Officer receives the first application component before the effective date of this rule.

**7-2-050. Monitoring and Records (NOT APPLICABLE)**

**APPENDIX L**  
**PROCEDURES FOR DETERMINING AMBIENT AIR CONCENTRATIONS**  
**FOR HAZARDOUS AIR POLLUTANTS**  
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**SECTION 1 – APPLICABILITY**

**SECTION 2 – CHRONIC AMBIENT AIR CONCENTRATIONS**

**SECTION 3 – ACUTE AMBIENT AIR CONCENTRATIONS**

**APPENDIX L**  
**PROCEDURES FOR DETERMINING AMBIENT AIR CONCENTRATIONS**  
**FOR HAZARDOUS AIR POLLUTANTS**

1. **APPLICABILITY:** The procedure described in Appendix L of these rules shall be used to develop chronic ambient air concentrations (CAACs) and acute ambient air concentrations (AAACs) for hazardous air pollutants (HAPs) for the following:
  - a. Any HAP not included in Chapter 7 Article 2 - Pinal County Hazardous Air Pollutants (HAPS) Program- Table 3-Acute And Chronic Ambient Air Concentrations of these rules; and
  - b. Any compound included in a group of HAPs listed in Chapter 7 Article 2- Pinal County Hazardous Air Pollutants (HAPS) Program-Table 3-Acute And Chronic Ambient Air Concentrations of these rules, other than those identified in the group listing as the “selected” compound.
2. **CHRONIC AMBIENT AIR CONCENTRATIONS:**
  - a. The applicant shall review the following data sources and, except as otherwise provided, shall give them the priority indicated in the development of chronic ambient air concentrations (CAACs):
    1. **Tier 1 Data Sources:** Reference Concentrations (RfCs) and air Unit Risk Factors (URFs) as presented in the Integrated Risk Information System (IRIS) of the United States Environmental Protection Agency (EPA).
    2. **Tier 2 Data Sources:**
      - a. Preliminary Remediation Goals (PRGs) developed by Region 9 of the EPA.
      - b. Risk-Based Concentrations (RBCs) developed by Region 3 of the EPA.
    3. **Tier 3 Data Sources:**
      - a. Minimal Risk Levels (MRLs) developed by the Agency For Toxic Substances And Disease Registry (ATSDR).
      - b. Reference Exposure Levels (RELs) and Unit Risk Factors (CalURFs) developed by the California Environmental Protection Agency.
  - b. **Evaluation Of Tier 1 Values:**
    1. **Calculation Of Concentrations:**
      - a. Reference Concentrations (RfCs) shall be multiplied by 1.04 to reflect an assumed exposure of 350 rather than 365 days per year.
      - b. Unit Risk Factors (URFs) shall be transformed into concentrations in milligrams per cubic meter (mg/m<sup>3</sup>) by applying the following equation:  
TR x ATc/(EF x IFA adj x [URF x BW/IR])  
Where: TR = 1E-06  
ATc = 25,550 days  
EF = 350 days/year  
IFA adj = 11m<sup>3</sup>-year/kg-day  
BW = 70 kg  
IR = 20 m<sup>3</sup>/day
    2. **Comparison To Tier 2 And Tier 3 Concentrations:**
      - a. The concentration developed in accordance with Section 2(b)(1) of this appendix shall be compared to the Tier 2 and Tier 3 concentrations for the compound, if any.
      - b. Unit Risk Factor (URF)-based concentrations shall be compared only to concentrations based on Unit Risk Factors (CalURFs) developed by the California Environmental Protection Agency.

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- c. Reference Concentrations (RfCs) – based concentrations shall be compared to concentrations based on preliminary Remediation Goals (PRGs), Risk-Based Concentrations (RBCs), Minimal Risk Levels (MRLs), and Reference Exposure Levels (RELs).
  - d. If there is reasonable agreement between Tier 1 concentration and the other concentrations for the compound, the Tier 1 concentration shall be selected as the chronic ambient air concentration (CAAC).
  - e. If the Tier 1 concentration is not in reasonable agreement with the other concentrations and one of the other concentrations is based on more recent or relevant studies, that concentration shall be selected as the chronic ambient air concentration (CAAC). Otherwise, the Tier 1 concentration shall be selected.
  - 3. If both a Reference Concentration (RfC)-based and a Unit Risk Factor (URF)-based Tier 1 concentration is selected under Section 2(b)(2) of this appendix, the more stringent of the two shall be used as the chronic ambient air concentration (CAAC).
  - 4. If a Tier 1 value is selected in accordance with this section of this appendix, no further evaluation of Tier 2 or Tier 3 concentrations is required.
  - c. **Evaluation of Tier 2 Concentrations:**
    - 1. **Selection of Tier 2 Values for Further Evaluation:**
      - a. If there is only a Preliminary Remediation Goal (PRG) or Risk-Based Concentrations (RBCs) for the compound, it shall be selected for further evaluation in accordance with Section 2(c)(2) of this appendix.
      - b. If there is both a Preliminary Remediation Goal (PRG) and a Risk-Based Concentration (RBC) for the compound, the concentrations shall be compared. If the concentrations are similar, the Preliminary Remediation Goal (PRG) shall be selected for further evaluation. If the concentrations are not similar and the Risk-Based Concentration (RBC) is based on more recent or more relevant studies, it shall be selected for further evaluation. Otherwise, the Preliminary Remediation Goal (PRG) shall be selected.
    - 2. **Comparison to Tier 3 Concentrations:**
      - a. The concentration developed in accordance with Section 2(c)(1) of this appendix shall be compared to the Tier 3 concentrations for the compound, if any. For purposes of this comparison, only Minimal Risk Level (MRL)-based or Reference Exposure Level (REL)-based concentration shall be considered.
      - b. If there is reasonable agreement between the Tier 2 concentrations and the Tier 3 concentrations for the compound, the Tier 2 concentration shall be selected as the chronic ambient air concentration (CAAC).
      - c. If the Tier 2 concentration is not in reasonable agreement with the Tier 3 concentrations and one of the Tier 3 concentrations is based on more recent or relevant studies, that concentration shall be selected as the chronic ambient air concentration (CAAC). Otherwise, the Tier 2 concentration shall be selected.
      - d. If the Tier 2 concentration is selected in accordance with Section 2(c) of this appendix, no further evaluation of Tier 3 concentrations is required.
  - d. **Evaluation of Tier 3 Values:**
    - 1. **Calculation of Concentrations:**
      - a. Minimal Risk Levels (MRLs) and Reference Exposure Levels (RELs) shall be multiplied by 1.04 to reflect an assumed exposure of 350 rather than 365 days per year.
      - b. Unit Risk Factors (CalURFs) developed by the California Environmental Protection Agency shall be transformed into concentrations in milligrams per cubic meter (mg/m<sup>3</sup>) by applying the following equation:  

$$\text{TR} \times \text{ATc} / (\text{EF} \times \text{IFA adj} \times [\text{CalURF} \times \text{BW} / \text{IR}])$$

Where:     $\text{TR} = 1\text{E-}06$   
               $\text{ATc} = 25,550 \text{ days}$   
               $\text{EF} = 350 \text{ days/year}$   
               $\text{IFA adj} = 11 \text{ m}^3\text{-year/kg-day}$   
               $\text{BW} = 70 \text{ kg}$   
               $\text{IR} = 20 \text{ m}^3/\text{day}$
    - 2. **Selection of Concentration:**
      - a. If both a Minimal Risk Level (MRL) and a Reference Exposure Level (REL) exist for the compound, the most appropriate shall be selected after considering the relevance and timing of the studies on which the levels are based.
      - b. If there is both a Unit Risk Factors (CalURFs) developed by the California Environmental Protection Agency-based concentration and a concentration based on a Minimal Risk Level (MRL) or a Reference Exposure Level (REL) for the compound, the more stringent of the two shall be selected.
  - e. **No Available Data:** If there is no data available in any of the sources identified in Section 2(a) of this appendix for the compound, the applicant must perform a Tier 4 risk management analysis (RMA) under Chapter 7 Article 2-Pinal County Hazardous Air Pollutants (HAPS) Program-§7-2-030.6-Risk Management Analysis (RMA) of these rules or forego the risk management analysis (RMA) option.
3. **ACUTE AMBIENT AIR CONCENTRATIONS:**
  - a. **Selection of Concentration:**
    - 1. The first concentration identified by evaluating the following data sources in the order listed shall be adjusted, where required, and used as the acute ambient air concentration (AAAC) for the compound:

- a. The level 2 four-hour average Acute Exposure Guideline Level developed by the EPA Office Of Prevention-Pesticides And Toxic Substances.
  - b. The level 2 Emergency Response Planning Guideline (ERPG) developed by the American Industrial Hygiene Association. The acute ambient air concentration (AAAC) shall be the Emergency Response Planning Guideline (ERPG) divided by two.
  - c. The level 2 Temporary Emergency Exposure Limit (TEEL) developed by the United States Department Of Energy's Emergency Management Advisory Committee's Subcommittee On Consequence Assessment And Protective Action. The acute ambient air concentration (AAAC) shall be the Temporary Emergency Exposure Limit (TEEL) divided by two.
2. **No Available Data:** If there is no data available in any of the sources identified in Section 3(a) of this appendix, the applicant must perform a Tier 4 risk management analysis (RMA) under Chapter 7 Article 2-Pinal County Hazardous Air Pollutants (HAPS) Program-§7-2-030.6-Risk Management Analysis (RMA) of these rules or forego the risk management analysis (RMA) option.