

CHAPTER 7. HAZARDOUS AIR POLLUTANT STANDARDS

ARTICLE 1. FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

7-1-010. General

- A. The purpose of this article is to establish emission standards for hazardous air pollutants.
- B. The provisions of this article apply to the owner or operator of any stationary source for which a standard is prescribed under this article. Any such stationary source must also comply with other regulations of the Pinal County Air Quality Control District.
- C. Pinal County shall enforce the emission standards for hazardous air pollutants listed in §7-1-030. To the extent that the Administrator of the United States Environmental Protection Agency may delegate to the District administrative or enforcement authority with respect to any specific standard, the District shall effect such administration or enforcement to the extent and in the manner allowed by law. Incorporation by reference does not include nondelegable functions of the EPA Administrator, including but not limited to approval of alternate or equivalent test methods. As used in 40 C.F.R. 61 and 63: "Administrator" means the Control Officer of the Pinal County Air Quality Control District, except that the Control Officer shall not be authorized to approve alternate or equivalent test methods, alternative standards or work practices, equivalency demonstrations or innovative technology waivers as covered in Section 112(e) "Schedule for Standards and Review" and Section 112(h) "Work practice standards and other requirements" of the FCAA.
- D. Reserved.
- E. When any provision of the C.F.R. incorporated under this Article requires a request, report, application, submittal or other written communication, a copy of each such document shall be filed with the Pinal County Air Quality Control District, P.O. Box 987, Florence, Arizona 85232. To the extent that the Administrator has delegated to the District administrative authority with respect to any particular Subpart of the C.F.R. incorporated under this Article, the filing with the District required under this subsection will supplant the need to make additional filings with the Regional Administrator. The District will maintain a publicly available list of those Subparts for which such administrative authority has been delegated to the District.
- F. The District shall maintain a publicly accessible copy of each Subpart the C.F.R. incorporated under this Article.

[Adopted effective November 3, 1993. Amended February 22, 1995. Revised July 12, 2000, contingent upon EPA approval of corresponding revisions to Pinal Title V program as granted interim approval at 61 FR 55910 (10/30/96).]

7-1-020. Definitions

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

1. ACCIDENTAL RELEASE - An unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationery source.

2. ADMINISTRATOR - As used in any Subpart of the C.F.R. incorporated under this Article shall mean the Control Officer, subject to the limitations established in this Article.
3. AREA SOURCE - Any stationary source of federally listed hazardous air pollutants that is not a major source, but not including motor vehicles or nonroad vehicles subject to regulation under Subchapter II of the Clean Air Act (1990).
4. EXISTING SOURCE - Any stationary source other than a new source.
5. MAJOR SOURCE - Any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, ten (10) tons per year or more of any federally listed hazardous air pollutant or twenty-five (25) tons per year or more of any combination of federally listed hazardous air pollutants. A lesser quantity, or in the case of radionuclides, different criteria, may be established by the Administrator pursuant to §112 of the Clean Air Act (1990) and adopted by the Control Officer by rule.
6. MODIFICATION - Any physical change in, or change in the method of operation of, a major source which increases the actual emissions of any federally listed hazardous air pollutant emitted by such source by more than an amount numerically equal to a corresponding *de minimis* amount or which results in the emission of any federally listed hazardous air pollutant not previously emitted by more than a relevant *de minimis* amount. A physical change to a source, or change in the method of operation of a source, is not a modification if the change complies with the offset requirements of §112(g)(1) of the Clean Air Act (1990), which is hereby incorporated by reference.
7. NEW SOURCE - A stationary source, the construction or reconstruction of which is commenced after the Administrator first proposes regulations under §112 of the Clean Air Act (1990) establishing an emission standard applicable to such source.
8. REGULATED SUBSTANCE - Any substance listed under §112(r)(3) of the Clean Air Act (1990) or 40 C.F.R. §68.130 (65 FR 13250, March 13, 2000).
9. THRESHOLD QUANTITY - The quantity specified for regulated substances under §112(r)(5) of the Clean Air Act (1990) or listed in 40 C.F.R. §68.130 (65 FR 13250, March 13, 2000) and determined to be present at a stationary source as specified in 40 C.F.R. §68.5 (65 FR 13250, March 13, 2000).

[Adopted effective November 3, 1993. Amended February 22, 1995. Amended December 3, 2003.]

7-1-030. Performance standards for federally listed hazardous air pollutants

- A. Subject to the specified exceptions, the following Subparts of 40 CFR Part 61 and 63, NESHAPs, along with accompanying appendices, adopted by the Administrator as of July 1, 2010, and other than as expressly defined below, no future editions, are hereby adopted by reference:
 1. SUBPART A - General Provisions
 2. SUBPART B - Radon Emissions from Underground Uranium Mines
 3. SUBPART C - Beryllium
 4. SUBPART D - Beryllium Rocket Motor Firing
 5. SUBPART E - Mercury
 6. SUBPART F - Vinyl Chloride
 7. Reserved - G
 8. Reserved - H
 9. Reserved - I
 10. SUBPART J - Benzene Fugitive Emissions Sources and Equipment Leaks
 11. Reserved - K

12. SUBPART L - Benzene Emissions from Coke By-Product Recovery Plants
 13. SUBPART M - Asbestos
 14. SUBPART N - Inorganic Arsenic Emissions from Glass Manufacturing Plants
 15. SUBPART O - Inorganic Arsenic Emissions from Primary Copper Smelters
 16. SUBPART P - Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities
 17. Reserved - Q
 18. Reserved - R
 19. Reserved - S
 20. Reserved - T
 21. Reserved - U
 22. SUBPART V - Volatile Hazardous Air Pollutants: Fugitive Emissions and Equipment Leaks
 23. Reserved - W
 24. Reserved - X
 25. SUBPART Y - Benzene Storage Vessels
 26. Reserved - Z
 27. Reserved - AA
 28. SUBPART BB - Benzene Transfer Operations
 29. Reserved - CC
 30. Reserved - DD
 31. Reserved - EE
 32. SUBPART FF - Benzene Waste Operations
- B. The following Subparts of 40 CFR Part 63, NESHAPs for Source Categories, along with accompanying appendices and amendments, finally adopted or revised by the Administrator as of July 1, 2010, and other than as expressly defined below, no future editions are adopted by reference:
1. Subpart A - General Provisions
 2. Subpart B - Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)
 3. Subpart C - List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List.
 4. Subpart D - Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants
 5. Subpart E - Approval of State Programs and Delegation of Federal Authorities
 6. Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry
 7. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
 8. Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks
 9. Subpart I - - National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks
 10. Subpart J - National Emissions Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production
 11. Reserved - K
 12. Subpart L - National Emission Standards for Coke Oven Batteries

13. Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities
14. Subpart N - Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
15. Subpart O - Ethylene Oxide Emissions for Sterilization Facilities
16. Reserved - P
17. Subpart Q - Industrial Process Cooling Towers
18. Subpart R - Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
19. Subpart S - Pulp and Paper Industry
20. Subpart T - Halogenated Solvent Cleaning
21. Subpart U - Group I Polymers and Resins
22. Reserved - V
23. Subpart W - Epoxy Resins Production and Non-Nylon Polyamides Production
24. Subpart X - Secondary Lead Smelting
25. Subpart Y - Marine Tank Vessel Loading Operations
26. Reserved - Z
27. Subpart AA - NESHAP from Phosphoric Acid Manufacturing Plants
28. Subpart BB - NESHAP from Phosphate Fertilizers Production Plants
29. Subpart CC - Petroleum Refineries
30. Subpart DD - Off-site waste and recovery operations
31. Subpart EE - Magnetic Tape Manufacturing Operations
32. Reserved - FF
33. Subpart GG - Aerospace Manufacturing and Rework Facilities
34. Subpart HH - NESHAP Oil and Natural Gas Production Facilities
35. Subpart II - Shipbuilding and Ship Repair (Surface Coating)
36. Subpart JJ - Wood Furniture Manufacturing Operations
37. Subpart KK - Printing and Publishing Industry
38. Subpart LL - Primary Aluminum Reduction Plants
39. Subpart MM - NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-alone Semicheical Pulp Mills
40. Reserved - NN
41. Subpart OO - National emission standards for Tanks - Level 1
42. Subpart PP - National Emission Standards for Containers
43. Subpart QQ - National Emission Standards for Surface Impoundments
44. Subpart RR - National Emission Standards for Individual Drain Systems
45. Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas system or a Process
46. Subpart TT - National Emission Standards for Equipment Leaks - Control Level 1
47. Subpart UU - National Emission Standards for Equipment Leaks - Control Level 2
48. Subpart VV - National Emission Standards for Oil-water Separators and Organic-water separators
49. Subpart WW - National Emission Standards for Storage Vessels (Tanks) - Control Level 2
50. Subpart XX - National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations

51. Subpart YY - NESHAP for Source Categories: Generic Maximum Achievable Technology Standards
52. Reserved - ZZ
53. Reserved - AAA
54. Reserved - BBB
55. Subpart CCC - NESHAP for Steel Pickling - HCL Process Facilities and Hydrochloric Acid Regeneration Plants
56. Subpart DDD - NESHAP for Mineral Wool Production
57. Subpart EEE - Hazardous Air Pollutants from Hazardous Waste Combustors
58. Reserved - FFF
59. Subpart GGG - National Emission Standards for Pharmaceuticals Production
60. Subpart HHH - NESHAP from Natural Gas Transmission and Storage Facilities
61. Subpart III - NESHAP for Flexible Polyurethane Foam Production
62. Subpart JJJ - Group IV Polymers and Resins
63. Reserved - KKK
64. Subpart LLL - NESHAP for Portland Cement Manufacturing Industry
65. Subpart MMM - NESHAP for Pesticide Active Ingredient Production
66. Subpart NNN - NESHAP for Wool Fiberglass Manufacturing
67. Subpart OOO - NESHAP from the Manufacture of Amino/Phenolic Resins
68. Subpart PPP - NESHAP for Polyether Polyols Production
69. Subpart QQQ - NESHAP for Primary Copper Smelters
70. Subpart RRR - NESHAP for Secondary Aluminum Production
71. Reserved - SSS
71. Subpart TTT - NESHAP for Primary Lead Smelters
72. Subpart UUU - NESHAP for Petroleum Refineries, Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
73. Subpart VVV - NESHAP for Publicly Owned Treatment Works
74. Reserved - WWW
75. Subpart XXX - NESHAP for Ferroalloys Production; Ferromanganese and Silicomanganese
76. Subpart AAAA - NESHAP for Municipal Solid Waste Landfills
77. Subpart CCCC - NESHAP for Manufacture of Nutritional Yeast
78. Subpart DDDD - NESHAP for Plywood and Composite Wood Products
79. Subpart EEEE - NESHAP for Organic Liquids Distribution (Non-Gasoline)
80. Subpart FFFF - NESHAP for Miscellaneous Organic Chemical Manufacturing
81. Subpart GGGG - NESHAP for Solvent Extraction for Vegetable Oil Production
82. Subpart HHHH - NESHAP for Wet-Formed Fiberglass Mat Production
83. Subpart IIII - NESHAP for Surface Coating of Automobiles and Light-Duty Trucks
84. Subpart JJJJ - NESHAP for Paper and Other Web Coating
85. Subpart KKKK - NESHAP for Surface Coating of Metal Cans
86. Subpart MMMM - NESHAP for Surface Coating of Miscellaneous Metal Parts and Products
87. Subpart NNNN - NESHAP for Surface Coating of Large Appliances
88. Subpart OOOO - NESHAP for Printing, Coating, and Dyeing of Fabrics and Other Textiles
89. Subpart PPPP - NESHAP for Surface Coating of Plastic Parts and Products
90. Subpart QQQQ - NESHAP for Surface Coating of Wood Building Products
91. Subpart RRRR - NESHAP for Surface Coating of Metal Furniture

92. Subpart SSSS - NESHAP for Surface Coating of Metal Coil
93. Subpart TTTT - NESHAP for Leather Finishing Operations
94. Subpart UUUU - NESHAP for Cellulose Products Manufacturing
95. Subpart VVVV - NESHAP for Boat Manufacturing
96. Subpart WWWW - NESHAP for Reinforced Plastic Composites Production
97. Subpart XXXX - NESHAP for Rubber Tire Manufacturing
98. Subpart YYYY - NESHAP for Stationary Combustion Turbines
99. Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines
100. Subpart AAAAA - NESHAP for Lime Manufacturing Plants
101. Subpart BBBB - NESHAP for Semiconductor Manufacturing
102. Subpart CCCC - NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks
103. Subpart DDDD - NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters
104. Subpart EEEE - NESHAP for Iron and Steel Foundries
105. Subpart FFFF - NESHAP for Integrated Iron and Steel Manufacturing Facilities
106. Subpart GGGG - NESHAP for Site Remediation
107. Subpart HHHH - NESHAP for Miscellaneous Coating Manufacturing
108. Subpart IIII - NESHAP for Mercury Emissions From Mercury Cell Chlor-Alkali Plants
109. Subpart JJJJ - NESHAP for Brick and Structural Clay Products Manufacturing
110. Subpart KKKK - NESHAP for Clay Ceramics Manufacturing
111. Subpart LLLL - NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing
112. Subpart MMMM - NESHAP for Flexible Polyurethane Foam Fabrication Operations
113. Subpart NNNN - NESHAP for Hydrochloric Acid Production
114. Reserved - Subpart OOOO
115. Subpart PPPP - NESHAP for Engine Test Cells/Stands
116. Subpart QQQQ - NESHAP for Friction Materials Manufacturing Facilities
117. Subpart RRRR - NESHAP for Taconite Iron Ore Processing
118. Subpart SSSS - NESHAP for Refractory Products Manufacturing
119. Subpart TTTT - NESHAP for Primary Magnesium Refining
120. Subpart ZZZZ – NESHAP for Iron and Steel Foundries Area Sources
121. Subpart BBBB – NESHAP for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
122. Subpart CCCC – NESHAP for Gasoline Dispensing Facilities
123. Subpart HHHH – NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
124. Subpart OOOO – NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources
125. Subpart QQQQ – NESHAP for Wood Preserving Area Sources
126. Subpart WWWW – NESHAP for Area Source Standards for Plating and Polishing Operations
127. Subpart XXXX – NESHAP for Area Source Standards for Nine Metal Fabrication and Finishing
128. Subpart ZZZZ – NESHAP for Area Source Standards for Aluminum, Copper, and other Nonferrous Foundries

7-1-040. Control of federally listed hazardous air pollutants

- A. A person shall not obtain a permit or permit revision to modify an existing major source of federally listed hazardous air pollutants or to construct a new major source of federally listed hazardous air pollutants, unless the Control Officer determines that the person will install the maximum achievable control technology (MACT) for the modification or new major source.
- B. Until the Administrator promulgates, and the District adopts by rule, emissions standards establishing MACT for a source category or subcategory that includes a source subject to Subsection A of this section, the Control Officer shall determine MACT for the modification or new major source on a case-by-case basis. If the Control Officer determines that it is not feasible to prescribe or enforce a numerical emission limitation, a MACT standard imposed pursuant to this subsection may consist of a design, equipment, work practice or operational standard or a combination thereof.
- C. If the Administrator fails to adopt a standard for a source category or subcategory within eighteen (18) months after the deadline established for that category or subcategory pursuant to §§112(e)(1) and (3) of the Clean Air Act (1990), the owner or operator of an existing major source in that category or subcategory shall be required to submit a permit application or permit revision application for such source under §112(j)(2) of the Clean Air Act (1990) and such owner or operator shall also comply with §§112(j)(5) and (6) of the Clean Air Act (1990). The Control Officer shall be required to issue a permit or permit revision establishing MACT for the source on a case-by-case basis or an alternative emission limitation pursuant to §7-1-030. B. 3 of this Code or §112(h)(3) of the Clean Air Act (1990). If the Control Officer determines that it is not feasible to prescribe or enforce a numerical emission limitation, a MACT standard imposed pursuant to this subsection may consist of a design, equipment, work practice or operational standard or a combination thereof.
- D. When the EPA Administrator adopts and makes effective emission standards pursuant to the Clean Air Act §§112(d) or 112(f) (1990), those standards shall be adopted in the same manner as prescribed by the EPA Administrator.
- E. Where the Clean Air Act has established provisions, including specific schedules, for the regulation of source categories pursuant to the Clean Air Act §§112(e)(5) and 112(n) (1990), those provisions and schedules shall apply to the regulation of those source categories under this Code.
- F. For any category or subcategory of facilities licensed by the Nuclear Regulatory Commission, the Control Officer shall not adopt or enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation adopted by the EPA Administrator pursuant to the Clean Air Act §112 (1990).
- G. When the EPA Administrator makes one of the following findings pursuant to the Clean Air Act §112(n)(1)(A) (1990), the finding shall be effective for the purpose of the administration and enforcement of this Code in the same manner as prescribed by the EPA Administrator:
 - 1. A finding that regulation is not appropriate or necessary.
 - 2. A finding that alternative control strategies should be applied.

[Adopted effective November 3, 1993. Amended February 22, 1995.]

7-1-050. Case-by-case MACT determinations

- A. The applicant shall, as part of any permit application or permit revision application required by §§7-1-040.B. or C . , where MACT must be determined on a case-by case basis, provide appropriate documentation to demonstrate that the new source or modification will apply MACT.
- B. In no case shall the selected control approach be less stringent than a corresponding federal New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAPs), if any has been promulgated.

[Adopted effective November 3, 1993.]

7-1-060. Asbestos NESHAP Program Administration and Administration Funding

- A. For the purpose of defraying the District's cost of performing on-site inspections to confirm the absence, presence, quantity and nature of asbestos that may be present at demolition or renovation project subject to the asbestos NESHAP, §7-1-030.A.13, each notification required under that section shall be accompanied by a fee of \$100.
- B. For the purpose of defraying the costs of any sampling, testing and analysis that may be required as a result of the District's inspection of any demolition or renovation project subject to the asbestos NESHAP, §7-1-030.A.8, the owner or contractor conducting such project shall either:
 - 1. Have performed such post-inspection sampling and testing and confirming analysis as may be reasonably required by the District to verify the absence, quantity or character of asbestos on the site as may be required to reasonably support any assertions made in the notification under the NESHAP;
 - 2. Reimburse the District for the reasonable costs of having the District perform, or cause to be performed, such sampling, testing and confirming analyses as may be required to verify the presence, absence, quantity or character of asbestos at the site, or to determine applicability of the asbestos NESHAP. Reimbursement assessable under this subparagraph shall not exceed \$500, unless authorized in advance by the owner/contractor.

[Former section repealed in toto; new text adopted February 22, 1995, Amended October 13, 2010].

ARTICLE 2. 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

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

- 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.

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.

[Adopted effective June 13, 2007.]

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) thru 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 List of Hazardous Air Pollutants of this rule.
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 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

Chemical	De Minimis (Lb/Hour)	De Minimis (Lb/Year)
1,1,1-Trichloroethane (Methyl Chloroform)	117	14,247
1,1,2,2-Tetrachloroethane	N/A	0.20
1,3-Butadiene	N/A	0.39
1,4-Dichlorobenzene	N/A	1.9
2,2,4-Trimethylpentane	51	N/A
2,4-Dinitrotoluene	N/A	0.13
2-Chloroacetophenone	N/A	0.19
Acetaldehyde	N/A	5.3
Acetophenone	1.4	2,261
Acrolein	0.013	0.129
Acrylonitrile	N/A	0.17
Antimony Compounds (Selected Compound: Antimony)	0.71	9.0
Arsenic Compounds (Selected Compound: Arsenic)	N/A	0.0027
Benzene	N/A	1.5
Benzyl Chloride	N/A	0.25
Beryllium Compounds (Selected Compound: Beryllium)	0.000707	0.0049
Biphenyl	2.1	1,130
bis (2-Ethylhexy) Phthalate	0.71	3.0
Bromoform	0.42	11
Cadmium Compounds (Selected Compound:	N/A	0.0065

Cadmium)		
Carbon Disulfide	18	4,522
Carbon Tetrachloride	N/A	0.78
Carbonyl Sulfide	1.7	N/A
Chlorobenzene	57	6,442
Chloroform	N/A	2.2
Chromium Compounds (Selected Compound: Hexavalent Chromium)	N/A	0.0010
Cobalt Compounds (Selected Compound: Cobalt)	N/A	0.0042
Cumene	53	2,583
Cyanide Compounds (Selected Compound: Hydrogen Cyanide)	0.22	19
Dibenzofurans	1.4	45
Dichloromethane (Methylene Chloride)	20	25
Dimethyl Formamide	9.3	194
Dimethyl Sulfate	0.018	N/A
Ethyl Benzene	14	6,442
Ethyl Chloride (Chloroethane)	71	64,420
Ethylene Dibromide (Dibromoethane)	N/A	0.020
Ethylene 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:	N/A	0.12

Aroclor 1254)		
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
Trichloroethylene	N/A	0.10
Vinyl Acetate	22	1,295
Vinyl Chloride	N/A	1.3
Vinylidene Chloride (1,2-Dichloroethylene)	2.1	1,295
Xylene (Mixed Isomers)	98	644

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.

[Adopted effective June 13, 2007.]

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>
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (Including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride

100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (Isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethylaniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate

77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (All isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
60344	Methyl hydrazine
74884	Methyl iodine (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis(2,chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)

101779	4,4'-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (Chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide

75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (Isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes

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)₂

Glycol Ethers

- a. Glycol ethers include mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)[n]-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.
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 ARS §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 ARS §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 ARS §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 ARS §49-480.04-County Air Pollution Control-County Program For Control Of Hazardous Air Pollutants and this 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 ARS §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 ARS §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 ARS §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 ARS §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
 - vi. 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 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 ARS §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 ARS §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 ARS §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 ARS §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.
 - c. If the applicant does not submit a new proposal, the Control Officer may deny the application for permit or permit revision.
 - d. If the Control Officer determines that the new proposal fails to comply with ARS §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 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 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.
 - 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

Chemical	Acute Ambient Air Concentrations (mg/m ³)	Chronic Ambient Air Concentrations (mg/m ³)
1,1,1-Trichloroethane (Methyl Chloroform)	2,075	2.30E+00

1,1,2,2-Tetrachloroethane	18	3.27E-05
1,3-Butadiene	7,514	6.32E-05
1,4-Dichlorobenzene	300	3.06E-04
2,2,4-Trimethylpentane	900	N/A
2,4-Dinitrotoluene	5.0	2.13E-05
2-Chloroacetophenone	N/A	3.13E-05
Acetaldehyde	306	8.62E-04
Acetophenone	25	3.65E-01
Acrolein	0.23	2.09E-05
Acrylonitrile	38	2.79E-05
Antimony Compounds (Selected Compound: Antimony)	13	1.46E-03
Arsenic Compounds (Selected Compound: Arsenic)	2.5	4.41E-07
Benzene	1,276	2.43E-04
Benzyl Chloride	26	3.96E-05
Beryllium Compounds (Selected Compound: Beryllium)	0.013	7.90E-07
Biphenyl	38	1.83E-01
bis (2-Ethylhexy) Phthalate	13	4.80E-04
Bromoform	7.5	1.72E-03
Cadmium Compounds (Selected Compound: Cadmium)	0.25	1.05E-06
Carbon Disulfide	311	7.30E-01
Carbon Tetrachloride	201	1.26E-04
Carbonyl Sulfide	30	N/A
Chlorobenzene	1,000	1.04E+00
Chloroform	195	3.58E-04
Chromium Compounds (Selected Compound: Hexavalent Chromium)	0.10	1.58E-07
Cobalt Compounds (Selected Compound: Cobalt)	10	6.86E-07
Cumene	935	4.17E-01
Cyanide Compounds (Selected Compound: Hydrogen Cyanide)	3.9	3.13E-03
Dibenzofurans	25	7.30E-03
Dichloromethane (Methylene Chloride)	347	4.03E-03
Dimethyl Formamide	164	3.13E-02
Dimethyl Sulfate	0.31	N/A
Ethyl Benzene	250	1.04E+00
Ethyl Chloride (Chloroethane)	1,250	1.04E+01
Ethylene Dibromide (Dibromoethane)	100	3.16E-06
Ethylene Dichloride (1,2-Dichloroethane)	405	7.29E-05
Ethylene Glycol	50	4.17E-01
Ethylidene Dichloride (1,1-Dichloroethane)	6,250	5.21E-01
Formaldehyde	17	1.46E-04
Glycol Ethers (Selected Compound: Diethylene Glycol, Monoethyl Ether)	250	3.14E-03
Hexachlorobenzene	0.50	4.12E-06

Hexane	11,649	2.21E+00
Hydrochloric Acid	16	2.09E-02
Hydrogen Fluoride (Hydrofluoric Acid)	9.8	1.46E-02
Isophorone	13	2.09E+00
Manganese Compounds (Selected Compound: Manganese)	2.5	5.21E-05
Mercury Compounds (Selected Compound: Elemental Mercury)	1.0	3.13E-04
Methanol	943	4.17E+00
Methyl Bromide	261	5.21E-03
Methyl Chloride	1,180	9.39E-02
Methyl Hydrazine	0.43	3.96E-07
Methyl Isobutyl Ketone (Hexone)	500	3.13E+00
Methyl Methacrylate	311	7.30E-01
Methyl Tert-Butyl Ether	1,444	7.40E-03
N, N-Dimethylaniline	25	7.30E-03
Naphthalene	75	5.58E-05
Nickel Compounds (Selected Compound: Nickel Refinery Dust)	5.0	7.90E-06
Phenol	58	2.09E-01
Polychlorinated Biphenyls (Selected Compound: Aroclor 1254)	2.5	1.90E-05
Polycyclic Organic Matter (Selected Compound: Benzo(a)pyrene)	5.0	2.02E-06
Propionaldehyde	403	8.62E-04
Propylene Dichloride	250	4.17E-03
Selenium Compounds (Selected Compound: Selenium)	0.50	1.83E-02
Styrene	554	1.04E+00
Tetrachloroethylene (Perchloroethylene)	814	3.20E-04
Toluene	1,923	5.21E+00
Trichlorethylene	1,450	1.68E-05
Vinyl Acetate	387	2.09E-01
Vinyl Chloride	2,099	2.15E-04
Vinylidene Chloride (1,2-Dichloroethylene)	38	2.09E-01
Xylene (Mixed Isomers)	1,736	1.04E-01

- 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.

[Adopted effective June 13, 2007, Amended October 13, 2010]

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.

[Adopted effective June 13, 2007.]

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

[Adopted effective June 13, 2007.]