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# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Henry R. Darwin  
Director

JUN 1 2012

Mr. Jared Blumenfeld, Regional Administrator  
U.S. Environmental Protection Agency, Region IX  
Mail Code ORA-1  
75 Hawthorne Street  
San Francisco, CA 94105

RE: Arizona State Implementation Plan Revision under the Clean Air Act Section 110(a)(1) and (2);  
2006 PM<sub>2.5</sub> NAAQS, 1997 PM<sub>2.5</sub> NAAQS and 1997 8-hour ozone NAAQS

Dear Mr. Blumenfeld:

Consistent with the provisions of Arizona Revised Statutes §§ 49-104, 49-106, 49-404, 49-406 and 49-425 and the Code of Federal Regulations (CFR) Title 40, §§ 51.102 through 51.104, the Arizona Department of Environmental Quality (ADEQ) hereby submits to the U.S. Environmental Protection Agency (EPA) a supplement to the *Arizona State Implementation Plan Revision under Clean Air Act Sections 110(a)(1) and (2): Implementation of 2006 PM<sub>2.5</sub> National Ambient Air Quality Standards, 1997 PM<sub>2.5</sub> National Ambient Air Quality Standards, and 1997 8-hour Ozone National Ambient Air Quality Standards* as a revision to the Arizona State Implementation Plan (SIP). The initial revision was submitted on October 14, 2009.

Clean Air Act (CAA) Section 110 (a)(1) requires states to submit SIPs within three years following the promulgation of new or revised National Ambient Air Quality Standards (NAAQS) to provide for implementation, maintenance, and enforcement of such standards. Each of these SIPs must address certain basic elements or the “infrastructure” of its air quality management programs under CAA Section 110 (a)(2) including provisions for monitoring, emissions inventories, and modeling designed to assure attainment and maintenance of the NAAQS.

The SIP revision includes both existing statutes and rules. In order to expedite approval, ADEQ requests approval of the plan by parallel processing of the SIP revision pursuant to 40 C.F.R. Part 51 Appendix V, § 2.3.1. ADEQ anticipates that it will schedule a public hearing on the revision in July 2012, and hopes to submit the final SIP revision to EPA by late August 2012.

The SIP revision consists of a document demonstrating that the requirements of 40 C.F.R. Part 51 Appendix V are satisfied, existing statutes being proposed for inclusion in the SIP (Appendix A), existing ADEQ rules being proposed for inclusion in the SIP (Appendix B), existing Maricopa County rules being proposed for inclusion in the SIP (Appendix C), existing Pima County rules being proposed for inclusion

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in the SIP (Appendix D), and copies of the authorizing statutes cited above (Appendix E). A hard copy of the SIP and an electronic exact duplicate of the hard copy on CD are included with this letter.

Sincerely,



Eric C. Massey  
Director, Air Quality

Enclosures (2)

cc: Bill Wiley, Maricopa County Air Quality Department  
Ursula Kramer, Pima County Department of Environmental Quality  
Don Gabrielson, Pinal County Air Quality Department  
Colleen McKaughan, EPA Region IX  
Noah Smith, EPA Region IX



**Proposed Supplement to the Arizona State  
Implementation Plan under  
Clean Air Act Section 110(a)(1) and (2):  
Implementation of**

**2006 PM<sub>2.5</sub> National Ambient Air Quality Standards,**

**1997 PM<sub>2.5</sub> National Ambient Air Quality Standards,  
and**

**1997 8-Hour Ozone National Ambient Air Quality Standards**

**Parallel Processing Version**

**Air Quality Division**

**June 2012**

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## 1.0 INTRODUCTION

This supplement to the state implementation plan (SIP) provides the necessary documentation and authority required to demonstrate that Arizona State and local air quality management programs meet the basic program elements required under Clean Air Act (CAA) Sections 110(a)(1) and (2) for implementing the 2006 PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS), the 1997 PM<sub>2.5</sub> NAAQS, and the 1997 8-hour ozone NAAQS. This SIP is a supplement to the "Infrastructure" SIP that was submitted on October 14, 2009, for the 2006 PM<sub>2.5</sub> NAAQS, the 1997 8-hour Ozone NAAQS, and the 1997 PM<sub>2.5</sub> NAAQS.

ADEQ is seeking parallel processing of this supplement to the SIP under 40 C.F.R. Part 51, Appendix V, § 2.3.1 pending completion of the State's public notice and public hearing requirements. ADEQ will submit a final version of this SIP revision when public process has been completed.

Section 2.0 of this document addresses the criteria for an official SIP submission as set forth in 40 C.F.R. Part 51, Appendix V.

## 2.0 CRITERIA

### 2.1 Administrative Materials

**2.1(a) A formal letter of submittal from the Governor or [her] designee, requesting EPA approval of the plan or revision thereof (hereafter "the plan").**

See cover letter.

**2.1(b) Evidence that the State has adopted the plan in the State code or body of regulations; or issued the permit, order, consent agreement (hereafter "document") in final form.**

Copies of the statutes and rules are attached in Appendices A through D. Certified copies will be submitted with the final SIP submission.

**2.1(c) Evidence that the State has the necessary legal authority under State law to adopt and implement the plan.**

ADEQ is authorized to implement SIPs under Arizona Revised Statutes sections 49-104, 49-106, 49-404, 49-406 and 49-425, which are attached as Appendix E.

**2.1(d) A copy of the actual regulation, or document submitted for approval and incorporation by reference into the plan, including indication of the changes made to the existing approved plan, where applicable.**

See Appendices A through D. Tables 4-1 through 4-10 also show the statutes and rules being submitted for approval into the SIP.

**2.1(e) Evidence that the State followed all of the procedural requirements of the State's laws and constitution in conducting and completing the adoption/issuance of the plan.**

Not required for parallel processing version of SIP. See 40 C.F.R. Part 51, Appendix V, § 2.3.1(d).

**2.1(f) Evidence that public notice was given of the proposed change consistent with procedures approved by EPA, including the date of publication of such notice.**

Not required for parallel processing version of SIP. See 40 C.F.R. Part 51, Appendix V, § 2.3.1(d).

**2.1(g) Certification that public hearing(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable and consistent with the public hearing requirements in 40 CFR 51.102.**

Not required for parallel processing version of SIP. See 40 C.F.R. Part 51, Appendix V, § 2.3.1(d).

**2.1(h) Compilation of public comments and the State's response thereto.**

Not required for parallel processing version of SIP. See 40 C.F.R. Part 51, Appendix V, § 2.3.1(d).

## **2.2 Technical Support**

**2.2(a) Identification of all regulated pollutants affected by the plan.**

PM2.5 and ozone.

**2.2(b) Identification of the locations of affected sources including the EPA attainment/ nonattainment designation of the locations and the status of the attainment plan for the affected areas(s).**

Not applicable.

**2.2(c) Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.**

Not applicable.

**2.2(d) The State's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented (Section 110(l) demonstration).**

See below sections 5.3, 5.4 and 5.10.

**2.2(e) Modeling information required to support the proposed revision, including input data, output data, models used, justification of model selections, ambient monitoring data used, meteorological data used, justification for use of offsite data (where used), modes of models used, assumptions, and other information relevant to the determination of**

**adequacy of the modeling analysis.**

Not applicable.

**2.2(f) Evidence, where necessary, that emission limitations are based on continuous emission reduction technology.**

Not applicable.

**2.2(g) Evidence that the plan contains emission limitations, work practice standards and recordkeeping/reporting requirements, where necessary, to ensure emission levels.**

See below sections 5.1, 5.2, 5.3 and 5.6.

**2.2(h) Compliance/enforcement strategies, including how compliance will be determined in practice.**

See below sections 5.3 and 5.5.

**2.2(i) Special economic and technological justifications required by any applicable EPA policies, or an explanation of why such justifications are not necessary.**

No known deviations.

**3.0 REGULATORY BACKGROUND**

Clean Air Act Section 110(a)(1) requires states to submit SIPs within three years following the promulgation of new or revised NAAQS to provide for implementation, maintenance, and enforcement of such standards. Each of these SIPs must address certain basic elements or the "infrastructure" of its air quality management programs under CAA Section 110(a)(2). These elements, detailed in CAA Sections 110(a)(2)(A) through (M), include provisions for monitoring, emissions inventories, and modeling designed to assure attainment and maintenance of the NAAQS.

In July 1997, the U.S. Environmental Protection Agency (EPA) issued new National Ambient Air Quality Standards for 8-hour ozone and particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>). Subsequent litigation challenging the new standards created uncertainty on how to proceed, however, and delayed implementation.<sup>1</sup> On March 10, 2005, in response to a separate lawsuit over states' failure to submit Section 110(a)(1) and (2) plans for the 1997 standards, EPA entered into a Consent Decree with Earth Justice that obligated EPA to determine whether states have made the required SIP submissions.

The Consent Decree required EPA action on state SIPs addressing interstate transport of air pollution, a required SIP component under Section 110(a)(2)(D)(i), by March 15, 2005. On April 25, 2005, EPA published "Finding of Failure To Submit Section 110 State Implementation Plans for Interstate Transport for the National Ambient Air Quality Standards for 8-Hour Ozone and PM 2.5" (70 FR 21147). The April 25, 2005, finding, effective May 25, 2005, started a 24-month clock for EPA to either issue a final Federal Implementation Plan (FIP) to address the requirements of Section 110(a)(2)(D)(i) or to approve a SIP that addresses these requirements. In response to this action, ADEQ submitted *Revision to the*

<sup>1</sup> See *Whitman v. American Trucking Associations*, U.S. Supreme Court, Nos. 99-1257, 99-1426, February 27, 2001.

*Arizona State Implementation Plan Under Clean Air Act Section 110(a)(2)(D)(i) – Regional Transport on May 24, 2007.* EPA approved the plan in a Direct Final Rule on July 31, 2007 (72 FR 41629).

The Consent Decree also required EPA to determine whether states have submitted SIP revisions to meet the remaining requirements of sections 110(a)(1) and (2) by December 15, 2007, for the 1997 8-hour ozone standards (later extended to March 27, 2008), and by October 5, 2008, for the 1997 PM<sub>2.5</sub> standards. EPA issued *Guidance on SIP Elements Required Under Section 110(a)(1) and (2) for the 1997 8-hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards, October 2, 2007*, to assist states as they develop SIPs or certify that existing SIP elements are adequate to meet their outstanding obligations (see Appendix A).

EPA published "Completeness Findings for Section 110(a) State Implementation Plans for the 8-hour Ozone NAAQS" on March 27, 2008, which included a "finding of failure to submit" for Arizona (73 FR 16205). EPA's action started a 24-month deadline by which time EPA must promulgate a FIP to address Section 110(a)(1) and (2) requirements if the state fails to submit and obtain EPA approval of any necessary SIP revision or demonstrate existing state programs are sufficient to meet these requirements.

Arizona submitted *Analysis of Clean Air Act Section 110(a)(2) Air Quality Control Program Elements for Arizona for the 1997 PM<sub>2.5</sub> National Ambient Air Quality Standards* on September 18, 2008. The analysis demonstrated that, with the exception of 110(a)(2)(E)(i) and (ii) relating to adequate funding and conflicts of interest, and 110(a)(2)(G) relating to emergency powers and contingency plans, existing Arizona SIP elements and the federal prevention of significant deterioration (PSD) permit program are adequate to meet CAA Section 110(a)(2) requirements. EPA published "Completeness Findings for Section 110(a) State Implementation Plans Pertaining to the Fine Particulate Matter (PM<sub>2.5</sub>) NAAQS", effective November 21, 2008, in which EPA concurred that Arizona's submission was complete for the required CAA 110(a)(2) program elements for the 1997 PM<sub>2.5</sub> NAAQS except for Sections 110(a)(2)(E)(i), 110(a)(2)(E)(ii), and 110(a)(2)(G) (73 FR 62902; October 22, 2008). EPA's action started a 24-month deadline by which time EPA must approve a SIP that addresses these specific elements or to finalize a FIP.

Based on scientific studies regarding the effects of particle pollution, EPA subsequently revised the NAAQS for PM<sub>2.5</sub> effective December 18, 2006, to improve the protection of public health and welfare (71 FR 61144, October 17, 2006). This action required states to submit Section 110(a)(2) SIPs by September 21, 2009, to provide for implementation, maintenance, and enforcement of the 2006 PM<sub>2.5</sub> standards. Arizona submitted a SIP under this action on October 14, 2009.

In the October 14, 2009 submittal, Arizona submitted demonstration that the required Section 110(a)(2) elements are met, in part, for the 1997 PM<sub>2.5</sub> and 8-hour ozone NAAQS. Arizona also submitted ademonstration that Section 110(a)(2) elements for the 2006 PM<sub>2.5</sub> NAAQS. After subsequent discussions with EPA regarding the October 14, 2009 submittal, Arizona is supplementing the October 14, 2009 submittal with certified copies of specific statutes and rules, which Arizona has attached in Appendices A through D of this supplement.

#### **4.0 SUMMARY AND DISCUSSION OF THE SUPPLEMENT TO ARIZONA'S "INFRASTRUCTURE SIP"**

This document provides the specific statutes and rules, which are the authorities and infrastructure of Arizona State and local air quality management programs need to meet the basic program elements required under CAA Section 110(a)(2) for the 2006 PM<sub>2.5</sub> NAAQS and the requirements for the 1997 8-hour ozone and PM<sub>2.5</sub> NAAQS.

The statutes and programs described in Section 5.0 are adequate to meet the following requirements of the CAA for the 2006 PM<sub>2.5</sub> NAAQS, the 1997 8-hour ozone air quality standards, and the 1997 PM<sub>2.5</sub> NAAQS:

- 110(a)(2)(A), control measures and emission limits,
- 110(a)(2)(B), ambient air quality monitoring,
- 110(a)(2)(C), enforcement of all SIP measures and new source review and prevention of significant deterioration,
- 110(a)(2)(D), interstate transport (this requirement for the 1997 8-hour ozone NAAQS has already been met),
- 110(a)(2)(E)(i), adequate funding,
- 110(a)(2)(E)(ii), conflicts of interest,
- 110(a)(2)(E)(iii), State responsibility for ensuring adequate implementation of plan provisions,
- 110(a)(2)(F), emissions monitoring and reporting,
- 110(a)(2)(G) emergency episodes
- 110(a)(2)(H), plan revisions,
- 110(a)(2)(I), Part D nonattainment area plan requirements,
- 110(a)(2)(J), consultation with government officials and public notification of any exceedance of the air quality standards and prevention of significant deterioration and visibility protection,
- 110(a)(2)(K), air quality modeling,
- 110(a)(2)(L), permit fees, and
- 110(a)(2)(M), consultation/participation by affected local officials.

Arizona's air quality programs are sufficient at this time to assure attainment and maintenance of the 1997 8-hour ozone and PM<sub>2.5</sub> NAAQS and the 2006 PM<sub>2.5</sub> NAAQS in all areas of the State. The purpose of this supplement to the SIP is to submit to EPA several of the applicable air quality sections of Arizona Revised Statutes, ADEQ rules, Maricopa County Rules, and Pima County Rules, which have been amended and renumbered since the most recent approval of the SIP. Some of the statutes were not included in the original SIP submission, but are being provided in this Supplement in order to give additional information that may further satisfy requirements under CAA section 110(a)(2).

In addition, a number of air quality authorizing and implementing statutes have been added for Arizona programs, but have not been submitted or approved into the SIP prior to this supplement. These program improvement statutes, listed below, are included in this SIP supplement in Appendix A as Statutes to be approved into the federally enforceable Arizona State SIP.

- 28-1253. Registration requirement; exceptions; assessment; violation; classification,
- 35-313. Investment of trust and treasury monies; loan of securities,
- 38-101. Definitions,
- 38-501. Application of article,
- 38-502. Definitions,
- 38-503. Conflict of interest; exemptions; employment prohibition,
- 38-504. Prohibited acts,
- 38-505. Additional income prohibited for services,
- 38-506. Remedies,
- 38-507. Opinions of the attorney general, county attorneys, city or town attorneys and house and senate ethics committee,
- 38-508. Authority of public officers and employees to act,
- 38-509. Filing of disclosures,
- 38-510. Penalties,

38-511. Cancellation of political subdivision and state contracts; definition,  
49-103. Department employees; legal counsel,  
49-104. Powers and duties of the department and director,  
49-106. Statewide application of rules,  
49-107. Local delegation of state authority,  
49-405. Attainment area designations,  
49-435. Hearings on orders of abatement,  
49-441. Suspension and revocation of conditional order,  
49-455. Permit administration fund,  
49-460. Violations; production of records,  
49-461. Violations; order of abatement,  
49-462. Violations; injunctive relief,  
49-471. Definitions,  
49-476.01. Monitoring,  
49-480.02. Appeals of permit actions,  
49-490. Hearings on orders of abatement,  
49-495. Suspension and revocation of conditional order,  
49-502. Violation; classification,  
49-510. Violations; production of records,  
49-511. Violations; order of abatement,  
49-512. Violations; injunctive relief, and

There are also a few statutes and rules that have already been approved into the Arizona SIP.<sup>2</sup> ADEQ will not be submitting copies of these statutes with this Supplement since they are already approved into the Arizona SIP, but wanted to reference them as they are important to the approval of the October 14, 2009 "Infrastructure" SIP:

49-402 State and county control<sup>3</sup>,  
49-404 State implementation plan, and  
49-406 Nonattainment area plan  
49-543. Emissions inspection costs; disposition; fleet inspection; certificates  
49-544. Emissions inspection costs; disposition; fleet inspection; certificates  
49-551. Air quality fee; air quality fund; purpose  
R9-3-215. Ambient Air Quality Monitoring Methods & Procedures  
R9-3-219. Air Pollution Emergency Episodes

Tables 4-1 through 4-10, provided below, show which statute or rule ADEQ is asking to be incorporated into the Arizona SIP, which sections of those statutes are relevant to which section of the CAA, and which Statute or rule will be replaced in the SIP. All Statutes and rules are listed in Section 5.0 under each respective section of the CAA to which they relate. Provisions applicable solely to Title V sources are not submitted for approval into the Arizona SIP, as they have already been approved into Arizona's separate Title V Operating Permit Program.

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<sup>2</sup> Approval dates and Federal Register Notices are cited in tables 4-1 through 4-11.

<sup>3</sup> Additionally, ADEQ would like to remove the old version of ARS § 49-402, § 36-1706 State and county control, which still remains in the Arizona SIP. This action is reflected in Tables 4-1 through 4-11

**Table 4-1**

<b>CAA 110(a)(2)(A)</b>		
<b>Control Measures and Emission Limits</b>		
<b>ADEQ Programs</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 49-106 Statewide application of rules		
§ 49-107 Local delegation of state authority		
§ 49-402 State and county control <sup>4</sup>		§ 36-1706 State and county control
§ 49-404 State implementation plan <sup>5</sup>		
§ 49-406 Nonattainment area plan <sup>6</sup>		
§ 49-421 Definitions		§ 36-1701 Definitions
§ 49-424 Duties of department		§ 36-1705 Duties of department
§ 49-425 Rules; hearing		§ 36-1707 Rules and Regulations; Hearing; Limitations
<b>County Programs</b>		
§ 49-471 Definitions		
§ 49-473 Board of supervisors		§ 36-0773 Board of Supervisors
§ 49-479 Rules; hearing		§ 36-0779 Rules and regulations; hearing; limitations

<sup>4</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>5</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>6</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-2**

<b>CAA 110(a)(2)(B)</b>		
<b>Ambient Air Quality Monitoring</b>		
<b>ADEQ Programs</b>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-404 State implementation plan <sup>7</sup>		
§ 49-406 Nonattainment area plan <sup>8</sup>	(F)(11)	
§ 49-422 Powers and duties	(A), (B), (C), (E), and (F)	§ 36-1702 Powers
§ 49-424 Duties of department		§ 36-1705 Duties of department
<b>County Programs</b>		
§ 49-476.01 Monitoring		

<sup>7</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>8</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-3**

<b>CAA 110(a)(2)(C)</b>		
<b>Enforcement of Control Measures</b>		
<b>ADEQ Programs</b>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-103 Department employees; legal counsel		
§ 49-106 Statewide application of rules		
§ 49-107 Local delegation of state authority		
§ 49-402 State and county control <sup>9</sup>	All sections but (A)(8)	§ 36-1706 State and county control
§ 49-404 State implementation plan <sup>10</sup>		
§ 49-406 Nonattainment area plan <sup>11</sup>	(G)(1), (G)(2), and (G)(3)	
§ 49-422 Powers and duties		§ 36-1702 Powers
§ 49-424 Duties of department		§ 36-1705 Duties of department
§ 49-425 Rules; hearing		§ 36-1707 Rules and regulations; hearing; limitations
§ 49-433 Special inspection warrant		§ 36-1708.01 Special
§ 49-435 Hearings on orders of abatement		
§ 49-441 Suspension and revocation of conditional order		
§ 49-460 Violations; production of records		
§ 49-461 Violations; order of abatement		
§ 49-462 Violations; injunctive relief		
§ 49-463 Violations; civil penalties		§ 36-1720 Misdemeanor; penalty
<b>County Programs</b>		
§ 49-473 Board of supervisors		§ 36-0773 Board of supervisors
§ 49-488 Special inspection warrant		§ 36-0780.01 Special inspection warrant
§ 49-490 Hearings on orders of abatement		
§ 49-495 Suspension and revocation of conditional order		
§ 49-502 Violation; classification	(A), (B), and (C)	

<sup>9</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>10</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>11</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

§ 49-510 Violations; production of records		
§ 49-511 Violations; order of abatement		
§ 49-512 Violations; injunctive relief		
§ 49-513 Violations; civil penalties		§ 36-0789.01 Misdemeanor; penalty

**Table 4-4**

<b>CAA 110(a)(2)(E)</b>		
<b>Adequate Resources</b>		
<i>CAA 110(a)(2)(E)(i)</i>		
<b>ADEQ Programs</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 28-1253. Registration requirement; exceptions; assessment; violation; classification		
§ 35-313. Investment of trust and treasury monies; loans and securities		
§ 49-103 Department employees; legal counsel		
§ 49-402 State and county control		§ 36-1706 State and county control
§ 49-406 Nonattainment area plan		
§ 49-455 Permit administration fund	(A) and (B)(2)	
§ 49-543. Emissions inspection costs; disposition; fleet inspection; certificates	(A)	
§ 49-544 Emissions inspection fund; composition; authorized expenditures; exemptions; investment <sup>12</sup>		
§ 49-551 Air quality fee; air quality fund; purpose <sup>13</sup>		
<b>County Programs</b>		
§ 49-471 Definitions		
§ 49-478. Hearing board		§ 36-0778 Hearing board
§ 49-479 Rules; hearing		§ 36-0779 Rules and regulations; hearing; limitations
§ 49-480.02 Appeals of permit actions		
§ 49-482. Appeals to hearing board		§ 36-0779.03 Appeals to hearing board
<i>CAA 110(a)(2)(E)(ii)</i>		
<b>ADEQ and County Programs</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 38-101 Definitions		
§ 38-501 Application of article		
§ 38-502 Definitions		

<sup>12</sup> Approved into the Arizona SIP on 1/22/2003 (68 FR 2912).

<sup>13</sup> Approved into the Arizona SIP on 1/22/2003 (68 FR 2912).

§ 38-503 Conflict of interest; exemptions; employment prohibition		
§ 38-504 Prohibited acts		
§ 38-505 Additional income prohibited for services		
§ 38-506 Remedies		
§ 38-507 Opinions of the attorney general, county attorneys, city or town attorneys and house and senate ethics committee		
§ 38-508 Authority of public officers and employees to act		
§ 38-509 Filing of disclosures		
§ 38-510 Penalties		
§ 38-511 Cancellation of political subdivision and state contracts; definition		
<i>CAA 110(a)(2)(E)(iii)</i>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-107 Local delegation of state authority		
§ 49-402 State and county control <sup>14</sup>	(A)(1) through (A)(7), (B), (C),	§ 36-1706 State and county control
§ 49-404 State implementation plan <sup>15</sup>		
§ 49-406 Nonattainment area plan <sup>16</sup>	(C), (D), (E), (I), (J), (K)	

<sup>14</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>15</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>16</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-5**

<b>CAA 110(a)(2)(F) Emission Monitoring and Reporting</b>		
<b>ADEQ Programs</b>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-422 Powers and duties		§ 36-1702 Powers
R18-2-313. Existing Source Emission Monitoring		R9-3-313. Existing source emission monitoring
R18-2-327. Annual Emission Inventory Questionnaire		
<b>County Programs</b>		
§ 49-476.01 Monitoring		
<b>Maricopa County Rules</b>		
Rule 100. General Provisions and Definitions	Section 500 Monitoring and Records	
<b>Pima County Rules</b>		
17.12.040. Reporting Requirements		Rule 622. Reporting as a permit requirement
17.24.040. Reporting for compliance evaluations		

**Table 4-6**

<b>CAA 110(a)(2)(G) Emergency Powers</b>		
<b>ADEQ Programs</b>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-462 Violations; injunctive relief		
§ 49-465 Air pollution emergency		§ 36-1719 Air pollution emergency
R9-3-215. Ambient Air Quality Monitoring Methods & Procedures <sup>17</sup>		
R9-3-219. Air Pollution Emergency Episodes <sup>18</sup>		
Air Quality Monitoring Procedures Manual (Referenced in R9-3-215)		
<b>County Programs</b>		
§ 49-512 Violations; injunctive relief		

<sup>17</sup> Approved into the Arizona SIP on 10/19/1984 (49 FR 41026).

<sup>18</sup> Approved into the Arizona SIP on 9/28/1982 (47 FR 42572).

**Table 4-7**

<b>CAA 110(a)(2)(H) Plan Revisions</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 49-404 State implementation plan <sup>19</sup>		
§ 49-406 Nonattainment area plan <sup>20</sup>		

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<sup>19</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

<sup>20</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-8**

<b>CAA 110(a)(2)(J) Consultation with Government Officials, Public Notification, PSD and Visibility Protection</b>		
<b>ADEQ Programs</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 49-104 Powers and duties of the department and director	(A)(2), (A)(4), (B)(3) and (B)(5)	
§ 49-405 Attainment area designations		
§ 49-406 Nonattainment area plan <sup>21</sup>		
§ 49-424 Duties of department		§ 36-1705 Duties of department
§ 49-425 Rules; hearing		§ 36-1707 Rules and regulations; hearing; limitations
<b>County Programs</b>		
§ 49-473 Board of supervisors		§ 36-0773 Board of supervisors
§ 49-474 County control boards		§ 36-0774 County control boards
§ 49-479 Rules; hearing		§ 36-0779 Rules and regulations; hearing; limitations

<sup>21</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-9**

<b>CAA 110(a)(2)(K) Air Quality Modeling</b>		
<b>ADEQ Programs</b>		
<b>Statute/Rule</b>	<b>Relevant Sections</b>	<b>SIP Statute/Rule Replaced</b>
§ 49-406 Nonattainment area plan <sup>22</sup>	(A), (E), (F)(8), (F)(9)	
§ 49-422 Powers and duties	(A)(3)(a), (A)(3)(b), (C)(1), (C)(2), (C)(3), (C)(4), (C)(5)	§ 36-1702 Powers
§ 49-424 Duties of department	(2)	§ 36-1705 Duties of department
<b>County Programs</b>		
§ 49-473 Board of supervisors		§ 36-0773 Board of supervisors
§ 49-474 County control boards		§ 36-0774 County control boards

<sup>22</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

**Table 4-10**

<b>CAA 110(a)(2)(M)</b>		
<b>Consultation/Participation by Affected Local Entities</b>		
<b>ADEQ Programs</b>		
Statute/Rule	Relevant Sections	SIP Statute/Rule Replaced
§ 49-104 Powers and duties of the department and director	(A)(2), (A)(4), (B)(3) and (B)(5)	
§ 49-405 Attainment area designations	(B)(2)(6)	
§ 49-406 Nonattainment area plan <sup>23</sup>	(C), (D), (E), (F)	
§ 49-424 Duties of department	(8), (10)	§ 36-1705 Duties of department
§ 49-425 Rules; hearing	(B), (D)	§ 36-1707 Rules and regulations; hearing; limitations
<b>County Programs</b>		
§ 49-473 Board of supervisors		§ 36-0773 Board of supervisors
§ 49-474 County control boards		§ 36-0774 County control boards
§ 49-479 Rules; hearing		§ 36-0779 Rules and regulations; hearing; limitations

<sup>23</sup> Approved into the Arizona SIP on 6/08/2000 (65 FR 36353).

## **5.0 ANALYSIS OF CLEAN AIR ACT SECTION 110(a)(2) AIR QUALITY CONTROL PROGRAM ELEMENTS FOR ARIZONA**

Arizona Revised Statutes, Title 49, "Environment," divides responsibility and encourages cooperation for meeting the requirements of the CAA among the State, county agencies, and regional planning organizations. Currently the State and three county agencies operate air quality control programs under direct or delegated authority. These air pollution control agencies are: Arizona Department of Environmental Quality (ADEQ), Maricopa County Air Quality Department (MCAQD), Pima County Department of Environmental Quality (PDEQ), and the Pinal County Air Quality Control District (PCAQCD).

The Arizona Department of Environmental Quality has primary responsibility for air pollution control and abatement, and as such, is required to "maintain a state implementation plan that provides for implementation, maintenance and enforcement of national ambient air quality standards and protection of visibility as required by the clean air act" (ARS §49-404). ADEQ is also responsible for coordinating, along with local officials, the development, adoption, and enforcement of control measures and permits where no local air quality control agency exists. In addition, ADEQ has original jurisdiction in all areas of the State for certain stationary and portable, and all mobile sources, including petroleum refineries, coal fired electrical generating stations, and the motor vehicle emissions inspection program (ARS §49-402).

Except for the sources noted above, the county agencies have original jurisdiction for the issuance, administration, and enforcement of permits (ARS §49-402). The State may, however, assert jurisdiction where the local agency is unable to fulfill any function or duty as required. State law also provides direct county authority to adopt and enforce programs, rules, and ordinances for the prevention, control and abatement of air pollution (ARS Title 49, Chapter 3, Article 3).

Two metropolitan planning organizations, the Maricopa Association of Governments (MAG) and the Pima Association of Governments (PAG), are certified for the development of nonattainment and maintenance area plans within their respective jurisdictions (ARS §49-406). MAG and PAG submit their plans to ADEQ for adoption and inclusion in the state implementation plan pursuant to ARS §49-406.H.

The following sections summarize the requirements of CAA Sections 110(a)(2)(A) through (M) and present information that demonstrates Arizona's State and local air pollution control programs and meet these basic elements and are adequate to ensure attainment and maintenance of the particulate matter and ozone NAAQS.

## **5.1 CAA Section 110(a)(2)(A) – Control Measures and Emission Limits**

Section 110(a)(2)(A) requires SIPs to include enforceable emission limitations and other control measures, means, or techniques, as well as schedules for compliance necessary to meet applicable requirements of the CAA.

The timing of submittals for specific nonattainment area control measures and plans is subject to the requirements of CAA, Title 1, Part D, "Plan Requirements for Nonattainment Areas;" therefore, the demonstration of compliance with CAA Section 110(a)(2)(A) includes the necessary authority for State and local air quality management programs to adopt and implement control measures and plans to assure attainment and maintenance of the PM<sub>2.5</sub> and 8-hour ozone air quality standards in all areas of Arizona.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

- 49-106. Statewide application of rules
- 49-107. Local delegation of state authority
- 49-402. State and county control
- 49-404. State implementation plan
- 49-406. Nonattainment area plan
- 49-421. Definitions
- 49-424. Duties of department
- 49-425. Rules; hearing

For County Programs:

- 49-471. Definitions
- 49-473. Board of supervisors
- 49-479. Rules; hearing

## **5.2 CAA Section 110(a)(2)(B) – Ambient Air Quality Monitoring**

Section 110(a)(2)(B) requires SIPs to include provisions for establishment and operation of ambient air quality monitors, to compile and analyze ambient air quality data, and make these data available to EPA upon request.

Arizona maintains an extensive monitoring network operated by State and county agencies designed to collect, compile, and analyze ambient air quality data in attainment and nonattainment areas of the State. Operating agencies track data recovery, quality control and quality assurance parameters for all instruments operated at various network sites. Criteria pollutant concentrations, such as PM and ozone, are measured with instruments meeting EPA certification as Federal Reference or Equivalent Methods. All data collected within the PM and ozone compliance networks are compared to the NAAQS, statistically analyzed for trends, and recorded quarterly in EPA's Air Quality System.

Per Code of Federal Regulations (CFR), Title 40, Part 58 the State and county agencies (ADEQ, MCAQD, PDEQ, and PCAQCD) annually submit to EPA network monitoring plans. These plans identify the purpose of each monitor and provide evidence that both the siting and the operation of each monitor meets the network design, quality assurance, and other federal requirements of 40 CFR Part 58.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

49-404. State implementation plan

49-406(F)(11). Nonattainment area plan

49-422(A, )(B), (C), (E), (F). Powers and duties; definition

49-424. Duties of department

For County Programs:

49-473. Board of supervisors

### **5.3 CAA Section 110(a)(2)(C) – Enforcement of Control Measures**

Section 110 (a)(2)(C) requires states to include a program providing for enforcement of all SIP measures and the regulation of construction of new or modified stationary sources to meet prevention of significant deterioration (PSD) and nonattainment new source review (NSR) permitting requirements.

Arizona State and local agencies implement control and enforcement programs for permitted sources of air contaminants and those sources that are not regulated through permits programs (open uncontrolled burns, construction, vacant land, etc.). As part of the SIP enforcement program, ADEQ and local agencies track all committed SIP control measures and work with the entities responsible for those measures to provide any needed assistance and ensure timely implementation. Arizona Revised Statutes §49-406 provides additional assurance that PM and ozone nonattainment and maintenance measures will be implemented and enforced. Each agency that commits to implement any emission limitation or other control measure contained in the SIP is required to specify, in a resolution adopted by the governing body of the agency, its authority for implementing the measure and a program for enforcement of the limitation or measure. If any agency or entity fails to implement a committed measure, the county is authorized to file an action in superior court for injunction or any other relief provided by law. Similarly, if the county fails to ensure implementation of measures, the ADEQ Director is authorized, through the State Attorney General, to seek relief provided by law to ensure implementation of all measures.

Arizona Revised Statutes Title 49, Chapter 3, Articles 1, 2, and 3 establish ADEQ and local agency authority for preconstruction review and permitting. Under the air permits program, sources that emit regulated pollutants are required to obtain a permit before constructing, changing, replacing, or operating any equipment or process which may cause air pollution. This includes equipment designed to reduce air pollution. Permits are also required if an existing facility that causes air pollution transfers ownership, relocates, or otherwise changes operations.

ADEQ and county permitting agencies operate air quality permit compliance programs to ensure implementation of emission limits and other control measures for permitted sources. These programs include scheduled and unscheduled inspections conducted at major sources annually as well as compliance assistance initiatives. Permit and SIP enforcement authority is also provided in ARS §§49-460 through 463, and 49-510 through 513, under which the State or county may issue orders of abatement, and, through the Attorney General or County Attorney, seek injunctive relief for any violations of the air quality provisions of the law.

Per the authority noted above, all new sources and modifications to existing sources in Arizona are subject to state requirements for preconstruction review and permitting pursuant to *Arizona Administrative Code* (AAC), Title 18, Chapter 2, Articles 2 and 4 or relevant county rules. All new major sources and major modifications to existing major sources in Arizona are also subject to the nonattainment New Source Review (NSR) provisions of these rules or Prevention of Significant

Deterioration (PSD) for attainment areas. Since the submittal of the October 14, 2009 revision to the "Infrastructure" SIP, ADEQ has submitted a revision to the New Source Review SIP for parallel processing on April 10, 2012. ADEQ expects that the New Source Review SIP revision to bring the State of Arizona's SIP for areas under the jurisdiction of ADEQ into compliance with the NSR requirements of section 110(a)(2)(C) and 40 C.F.R. Part 51, Subpart I, with the exception of the requirements pertaining to greenhouse gases (GHGs).

#### Relevant sections of Arizona Revised Statutes:

##### For ADEQ Programs:

- 49-103. Department employees; legal counsel
- 49-106. Statewide application of rules
- 49-107. Local delegation of state authority
- 49-402. State and county control (All sections, but (A)(8))
- 49-404. State implementation plan
- 49-406(G)(1) through (G)(3). Nonattainment area plan
- 49-422. Powers and duties; definition
- 49-424. Duties of department
- 49-425. Rules; hearing
- 49-433. Special inspection warrant
- 49-435. Hearings on orders of abatement
- 49-441. Suspension and revocation of conditional order
- 49-460. Violations; production of records
- 49-461. Violations; order of abatement
- 49-462. Violations; injunctive relief
- 49-463. Violations; civil penalties

##### For County Programs:

- 49-473. Board of supervisors
- 49-488. Special inspection warrant
- 49-490. Hearings on orders of abatement
- 49-495. Suspension and revocation of conditional order
- 49-502(A), (B), (C). Violation; classification
- 49-510. Violations; production of records
- 49-511. Violations; order of abatement
- 49-512. Violations; injunctive relief
- 49-513. Violations; civil penalties

#### **5.4 CAA Section 110(a)(2)(D) – Interstate Transport**

Section 110 (a)(2)(D)(i) requires adequate provisions to ensure that any source or other emissions activity within the state does not contribute significantly to nonattainment, or interfere with maintenance, of the NAAQS in any other state, or interfere with any other state's required applicable implementation plan to prevent significant deterioration of air quality or to protect visibility.

ADEQ submitted *Revision to the Arizona State Implementation Plan Under Clean Air Act Section 110(a)(2)(D)(i) – Regional Transport* on May 24, 2007. This revision to the Arizona SIP addresses interstate transport of air pollution under CAA Section 110(a)(2)(D)(i) and contains a demonstration showing that Arizona does not significantly contribute to interstate transport of pollutants that impact

nonattainment in, or interfere with maintenance by, any other state with respect to the 1997 8-hour ozone and PM<sub>2.5</sub> air quality standards. The plan also demonstrates that Arizona meets the required prevention of significant deterioration of air quality and protection of visibility provisions of the law. EPA approved the plan in a Direct Final Rule on July 31, 2007 (72 FR 41629).

An analysis of "interstate transport" under CAA Section 110(a)(2)(D)(i) for the 2006 PM<sub>2.5</sub> air quality standards in Appendix B of the October 14, 2009 SIP revision. The analysis demonstrated that Arizona does not significantly contribute to interstate transport of pollutants that impact nonattainment in, or interfere with maintenance by, any other state with respect to the 2006 PM<sub>2.5</sub> NAAQS. The analysis also demonstrated that Arizona meets the required prevention of significant deterioration of air quality and protection of visibility provisions of the law.

As stated above in Section 5.3, since the submittal of the October 14, 2009 revision to the "Infrastructure" SIP, ADEQ has submitted a revision to the New Source Review SIP for parallel processing on April 10, 2012. ADEQ expects that the New Source Review SIP revision to bring the State of Arizona's SIP for areas under the jurisdiction of ADEQ into compliance with the NSR requirements of section 110(a)(2)(C) and 40 C.F.R. Part 51, Subpart I, with the exception of the requirements pertaining to greenhouse gases (GHGs).<sup>24</sup>

### **5.5 CAA Section 110(a)(2)(E) – Adequate Resources**

Generally, Section 110 (a)(2)(E) requires that each SIP shall provide: (i) necessary assurances that adequate personnel, funding, and legal authority are available to carry out the SIP; (ii) that any board which approves permits or enforcement orders represents the public interest and any conflict of interest by board members or an executive agency head be adequately disclosed; and (iii) necessary assurances that where the State has relied on a local or regional government agency, or instrumentality for implementation of any plan provision the state has responsibility for ensuring adequate implementation of such plan provision.

#### CAA Section 110(a)(2)(E)(i)

The purpose of Section 110(a)(2)(E) of the SIP is to provide the necessary assurances that the State of Arizona, Pinal County, Maricopa County, and Pima County have adequate personnel and funding under State law to carry out the SIP as required under the relevant portions of section 110(a)(2)(E)(i) of the Federal Clean Air Act (CAA), as amended in 1990, and the applicable SIP regulations in 40 CFR part 51 ("Requirements for Preparation, Adoption, and Submittal of Implementation Plans").

CAA section 110(a)(2)(E)(i) requires SIPs to provide:

necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, ... under State (and, as appropriate, local) law to carry out such implementation plan ...

The federal regulations in title 40, part 51, subpart O of the Code of Federal Regulations (40 CFR part 51, subpart O) ("Miscellaneous Plan Content Requirements") include requirements for SIPs pertaining to funding and personnel. Specifically, 40 CFR 51.280 ("Resources") requires:

<sup>24</sup> See NSR SIP Revision submittal at ADEQ's Website, [http://www.azdeq.gov/enviro/air/plan/download/sip\\_nsr.pdf](http://www.azdeq.gov/enviro/air/plan/download/sip_nsr.pdf) (Accessed May 31, 2012).

Each plan must include a description of the resources available to the State and local agencies at the date of submission of the plan and of any additional resources needed to carry out the plan during the 5-year period following its submission. The description must include projections of the extent to which resources will be acquired at 1-, 3-, and 5-year intervals.

In the State of Arizona, ADEQ is the primary organization responsible for developing, implementing, and enforcing the SIP.

Under ARS § 49-103 "Department employees; legal counsel" the director, "shall employ, determine the conditions of employment and specify the duties of administrative, secretarial and clerical employees as he deems necessary." Under § 49-103(B) " The attorney general shall be the legal advisor of the department and shall give legal services as the department requires...The attorney general shall prosecute and defend in the name of this state all actions necessary to carry out the provisions" of Title 49, relating to the environment.

Funding to staff to administer the Arizona air quality control programs consists of fees that are collected from regulated emissions sources, including fees collected to administer permitting programs. Under ARS § 49-455 "Permit administration fund", a permit administration fund is established consisting of fees and interest collected pursuant to article 2 governing state air pollution control. Under the statute, the director shall administer the fund subject to annual legislative appropriation. On notice from the director, the state treasurer shall invest and divest monies in the fund as provided in ARS § 35-313, and monies earned from investment shall be credited to the fund.

There is also an emissions inspection fund (see ARS § 49-544) that consists of monies appropriated to the fund by the legislature; monies collected pursuant to ARS § 49-543(A) concerning vehicle emissions inspections; monies collected by the director for the issuance of inspection certificates to owners of fleet emissions inspection stations; monies received from private grants or donations when so designated by the grantor or donor; and monies received from the United States by grant or otherwise to assist the state in any emissions inspection program.

A third source of funding in Arizona is the Air Quality Fund. Under ARS § 49-551 "Air quality fee; air quality fund; purpose" every person who is required to register a motor vehicle in the state pursuant to ARS § 28-2153 shall pay, in addition to the registration fee, an annual air quality fee at the time of vehicle registration. Interest earned on monies in the fund shall be credited to the fund. Monies in the air quality fund shall be used, subject to legislative appropriation, for air quality research and programs for the purpose of bringing area A or area B into or maintaining attainment status, improving air quality in areas outside area A and B, and reducing emissions of various pollutants including particulate matter, carbon monoxide, oxides of nitrogen, volatile organic compounds and hazardous air pollutants throughout the state. The funds are also used to monitor visible air pollution and reduce emissions of pollutants that contribute to visible air pollution in counties with a population of four hundred thousand persons or more. See §49-551(C)(1).

A final source of funding for ADEQ's air programs is CAA section 105 ("Grants for support of air pollution planning and control programs") under which EPA is authorized to make grants to air pollution control agencies to defray a portion of the costs associated with implementation of programs for the prevention and control of air pollution and achievement of the national ambient air quality standards. To qualify for such grants in a given year, air pollution control agencies must at least maintain the same level of funding from non-Federal funds for air pollution control programs as for the preceding year. See CAA section 105(c).

For Maricopa, Pima, and Pinal Counties, ARS § 49-107 "Local delegation of state authority" the director "may delegate to a local environmental agency, county health department, public health services district or municipality any functions, powers or duties which the director believes can be competently, efficiently and properly performed by the local agency if the local agency accepts the delegation and agrees to perform the delegated functions, powers and duties according to the standards of performance required by law and prescribed by the director." Under § 49-107(B), "Monies appropriated or otherwise made available to the department for distribution to local agencies may be allocated or reallocated in a manner designed to assure that the recognized local activities and the delegated functions, powers and duties are accomplished according to the applicable standards of performance." These delegation and funding mechanisms help ensure that the counties will have adequate personnel and funding to implement the delegated portions of the SIP.

The scope of county SIP authority is as follows: under ARS § 49-112 "County regulation; standards", a county may adopt rules that are as stringent as state rules and may administer permits provided that the cost of obtaining permits will be approximately equal or be less than the fee or cost of obtaining similar permits or approvals under title 49 or any rule adopted pursuant to title 49, which relates to the environment. The county no-drive days and travel reduction programs are funded by contractual agreements with ADEQ. Other county air quality programs are funded by county fee programs and other sources. In Arizona, the Metropolitan Planning Organizations (MPOs) certified to do planning (Maricopa and Pima) do so for ozone, carbon monoxide, or particulate nonattainment or maintenance areas. See § 49-406(C). The MPOs receive funding as directed in ARS § 49-406(A). ADEQ is responsible for all SO<sub>2</sub> plans and Pb plans even in Maricopa and Pima counties and for plans for the rest of the State. Under ARS § 49-402(B). Maricopa County Air Quality Control District (MCAQCD) and the Pima Department of Environmental Quality (PDEQ) each have a "control officer" whose powers to permit and enforce are set forth under the statute. ADEQ's contractor operates the Vehicle Emissions Inspection program in both Area A and in Area B.

ADEQ, MCAQCD, and PDEQ have been administering, implementing, and enforcing air programs designed to meet the CAA's SIP requirements for over 40 years., and the funding and personnel described above for each of the three agencies is adequate to meet the needs of these programs. Over the next five years, current funding and personnel levels are expected to remain stable via the funding mechanisms described above and to be sufficient to meet the resource needs of the agencies for air pollution control purposes over that period.

#### Relevant sections of Arizona Revised Statutes:

##### For State Programs:

- 28-2153. Registration requirement; exceptions; assessment; violation; classification
- 35-313. Investment of trust and treasury monies; loan of securities
- 49-103. Department employees; legal counsel
- 49-402. State and county control
- 49-406. Nonattainment area plan
- 49-455(A) and (B)(2). Permit administration fund
- 49-462. Violations; injunctive relief
- 49-463. Violations; civil penalties
- 49-465. Air pollution emergency
- 49-543(A). Emissions inspection costs; disposition; fleet inspection; certificates
- 49-544. Emissions inspection fund; composition; authorized expenditures; exemptions; investment
- 49-551. Air quality fee; air quality fund; purpose

For County Programs:  
49-479. Rules; hearing  
49-478. Hearing board  
49-480.02. Appeals of permit actions  
49-482. Appeals to hearing board

CAA Section 110(a)(2)(E)(ii)

The purpose of 110 (a)(2)(E)(ii) is to provide necessary assurances that any board which approves permits or enforcement orders represents the public interest and any conflict of interest by board members or an executive agency head be adequately disclosed

Permit approval and enforcement orders are provided by the ADEQ Director and county control officers. Arizona law, which is applicable to "all public officers and employees of incorporated cities or towns, of political subdivisions and of the state and any of its departments, commissions, agencies, bodies or boards," contains provisions for adequate disclosure of any conflict of interest. In the October 14, 2009 revision to the SIP, ADEQ submitted ARS Title 38, Chapter 3, Article 8, Conflict of Interest of Officers and Employees, in order to meet the conflict of interest requirements under Section 110(a)(2)(E)(ii). ADEQ commits to sending the certified copies of those statutes with the final submission.

Relevant sections of Arizona Revised Statutes:

For State and County Programs:  
38-101 Definitions  
Title 38, Chapter 3, Article 8, Conflict of Interest of Officers and Employees

CAA Section 110(a)(2)(E)(iii)

The purpose of 110 (a)(2)(E)(iii) is to provide necessary assurances that where the State has relied on a local or regional government agency, or instrumentality for implementation of any plan provision the state has responsibility for ensuring adequate implementation of such plan provision. Arizona Revised Statutes grant ADEQ primary regulatory authority for air pollution control and abatement in Arizona as well as responsibility for ensuring adequate implementation of SIP provisions.

Relevant sections of Arizona Revised Statutes:

49-107. Local delegation of state authority  
49-402(A)(1) through (A)(7), (B), and (C). State and county control  
49-404. State implementation plan  
49-406(C), (D), (E), (I), (J), (K). Nonattainment area plan

**5.6 CAA Section 110(a)(2)(F) – Emissions Monitoring and Reporting**

Section 110 (a)(2)(F) requires provision for emissions monitoring by owners or operators of stationary sources and periodic reports on the nature and amounts of emissions as well as correlation of such reports by the state agency with any emission limitations or standards.

Arizona Revised Statutes provide authority to require any sources of air contaminants to monitor, sample or perform other studies to quantify emissions of air contaminants or levels of air pollution that may be reasonably attributable to that source.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

Statutes:

49-422. Powers and duties; definition

Rules:

R18-2-313. Existing Source Emission Monitoring

R18-2-327. Annual Emission Inventory Questionnaire

For County Programs:

Statutes:

49-476.01. Monitoring

Maricopa County Rules:

Rule 100. General Provisions and Definitions, section 500 Monitoring and Records

Pima County Rules:

17.12.040. Reporting Requirements

17.24.040. Reporting for compliance evaluations

## **2.7 CAA Section 110(a)(2)(G) – Emergency Powers**

Section 110(a)(2)(G) requires states to provide for authority to address activities causing imminent and substantial endangerment to public health, including contingency plans to implement the emergency episode provisions in their SIPs.

Arizona Revised Statutes §49-465 authorizes State actions to alleviate or prevent an emergency health risk to the public due to air pollution or likely exceedance of the NAAQS. The Governor "may, by proclamation, declare that an emergency exists and may prohibit, restrict, or condition" any and all activity that contributes to the emergency. Arizona Administrative Code R18-2-220, "Air Pollution Emergency Episodes" (approved into the SIP as AAC R9-3-219 at 47 FR 42572; September 28, 1982), prescribes the procedures the ADEQ Director shall implement in order to prevent the occurrence of ambient air pollution concentrations which would cause significant harm to public health. Procedures include governmental and public notification of the nature of the episode and, at the directive of the Governor's office, possible curtailment of industrial and commercial activities. ADEQ is submitting with this supplement, the Air Quality Monitoring Procedures Manual referenced in R9-3-215, which as already been approved into the Arizona SIP on October 19, 1984 at 49 FR 41026.

Similar provisions for determining air pollution emergency episodes, advisory procedures, and control actions are contained in Maricopa, Pima, and Pinal County code (Maricopa County Air Pollution Control Regulations, Regulation VI - Emergency Episodes, Rule 600<sup>25</sup>; Emergency Episodes; Pima County Municipal Code, Title 17. Air Quality Control, Chapter 17.32, Emergency Episodes and Public

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<sup>25</sup> Maricopa County Rule 600 was adopted 7/13/1988 and approved by EPA into the SIP 3/18/1999 in 64 FR 13351.

Awareness, Article I. Emergency Episodes; Pinal County Air Quality Control District Code of Regulations, Chapter 2. Ambient Air Quality Standards, Article 7. Air Pollution Emergency Episodes<sup>26</sup>).

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

Statutes:

49-462. Violations; injunctive relief

49-465. Air pollution emergency

Rules:

R9-3-215. Ambient Air Quality Monitoring Methods & Procedures

R9-3-219. Air Pollution Emergency Episodes

Air Quality Monitoring Procedures Manual (submitted to supplement already approved rule R9-3-215).

For County Programs:

49-512. Violations; injunctive relief

### **5.8 CAA Section 110(a)(2)(H) – Plan Revisions**

Section 110(a)(2)(H) requires states to have authority to revise their SIPs in response to changes in the NAAQS or availability of improved methods for attaining the NAAQS. This Section also requires states to provide for plan revisions to ensure the adequacy of the plan to attain the air quality standards or to otherwise comply with any additional requirements established under the Clean Air Act.

Arizona Revised Statutes contain authority to revise the Arizona SIP to comply with the requirements of the CAA including changes in the NAAQS. Under ARS §49-404, ADEQ is required to "maintain a state implementation plan that provides for implementation, maintenance and enforcement of national ambient air quality standards and protection of visibility as required by the clean air act."

Relevant sections of Arizona Revised Statutes:

49-404. State implementation plan

49-406. Nonattainment area plan

### **5.9 CAA Section 110(a)(2)(I) – CAA Title 1, Part D Nonattainment Area Requirements**

Section 110(a)(2)(I) requires nonattainment area plans to meet the applicable requirements of CAA Title 1, Part D relating to nonattainment areas.

EPA's October 2, 2007, guidance (see Appendix A) notes that "the specific nonattainment area plan requirements of section 110(a)(2)(I) are subject to the timing requirement of section 172, not the timing requirement of section 110(a)(1), and also that SIPs to meet this section are not covered by the Consent Decree." Although the guidance is intended for the 1997 PM<sub>2.5</sub> and 8-hour ozone NAAQS, requirements for the 2006 PM<sub>2.5</sub> NAAQS under Section 110(a)(2)(I) are the same.

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<sup>26</sup> Pinal County Rules were adopted 6/29/1993 and approved by EPA into the SIP on 12/20/2000 in 65 FR 79742.

## **5.10 CAA Section 110(a)(2)(J) – Consultation with Government Officials, Public Notification, PSD and Visibility Protection**

Section 110(a)(2)(J) requires states to: (1) provide a process for consultation with local governments and Federal Land Managers carrying out NAAQS implementation requirements pursuant to Section 121 relating to consultation, (2) notify the public if NAAQS are exceeded in an area and to enhance public awareness of measures that can be taken to prevent exceedances per Section 127 relating to public notification, and (3) meet applicable requirements of Part C related to prevention of significant deterioration of air quality and visibility protection.

Arizona agencies maintain appropriate consultation procedures with local governments, CAA Section 174 and metropolitan planning agencies, and federal land managers regarding implementation of CAA requirements. ARS §49-406 requires the State, the metropolitan planning agency on behalf of affected local governments, county agencies, and the Department of Transportation to enter into a memorandum of agreement for the purpose of coordinating the development, implementation, and enforcement of nonattainment and maintenance plans. Additionally, opportunity for comment is provided through stakeholder meetings and public hearings held to solicit testimony from the public as well as federal and local air quality planning agencies prior to adoption of any revision to the Arizona SIP.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

- 49-104(A)(2), (A)(4), (B)(3) and (B)(5). Powers and duties of the department and director
- 49-405. Attainment area designations
- 49-406. Nonattainment area plan
- 49-424. Duties of department
- 49-425. Rules; hearing

For County Programs:

- 49-473. Board of supervisors
- 49-474. County control boards
- 49-479. Rules; hearing

CAA Section 127 requires measures to notify the public of instances or areas in which any air quality standard is exceeded during the preceding calendar year, to advise the public of health hazards associated with air pollution, and to enhance public awareness of measures that can be taken to improve air quality. The results of air quality monitoring conducted throughout Arizona, including ambient PM and ozone data, are published in ADEQ's Air Quality Annual Reports. Air quality forecasts, which include actual ambient air quality data for the preceding day, are made available to the public daily. The annual reports, daily forecasts, and other air quality information including tips for reducing pollution are available on the ADEQ Web site.

ADEQ, and those counties with authority to implement portions of the SIP (Maricopa, Pinal, and Pima counties), certify to do now and will continue to notify the public on a regular basis of instances or areas in which any primary NAAQS was exceeded, consistent with the requirements of sections 110(a)(2)(J) and 127 of the Federal Clean Air Act. Such notifications are and will be available on the state and county air quality websites, which are updated daily to identify exceedances of the NAAQS that occurred during the previous day or any portion of the preceding calendar year. We commit to continue, through these

websites, to advise the public of the health hazards associated with such exceedances and to increase public awareness of: (1) measures which can be taken to prevent a primary standard from being exceeded, and (2) ways in which the public can participate in regulatory and other efforts to improve air quality.

Relevant sections of Arizona Revised Statutes:

49-424. Duties of department

Clean Air Act, Title 1, Part C includes provisions relating to prevention of significant deterioration of air quality and visibility protection. PSD provisions are discussed in Section 5.3 above.

Arizona's visibility protection program is designed to analyze the causes of visibility impairment and to develop and implement control strategies as required. Requirements include analysis of emissions from new major sources or sources making major modifications and anticipated impacts on visibility at any Class I area. Arizona submitted a Regional Haze SIP under 40 CFR 51.309 in December 2003, and a 2004 revision for its four Class I areas on the Colorado Plateau. ADEQ submitted a SIP developed under 40 CFR 51.308 on February 28, 2011.

#### **5.11 CAA Section 110(a)(2)(K) – Air Quality Modeling**

Section 110(a)(2)(K) requires that SIPs provide for performing air quality modeling for predicting the effect of emissions on ambient air quality and to submit data related to the modeling to EPA upon request.

Arizona retains authority to perform air quality modeling for predicting the effect of emissions on ambient air quality. Where applicable, all modeling analyses for demonstrating attainment and maintenance of the NAAQS meet EPA's most recent guidance on air quality models. All information and data are made available to EPA as required.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

49-406(A), (E), (F)(8), (F)(9). Nonattainment area plan

49-422(A)(3)(a), (A)(3)(b), (C)(1), (C)(2), (C)(3), (C)(4), (C)(5). Powers and duties; definition

49-424(2). Duties of department

For County Programs:

49-473. Board of supervisors

49-474. County control boards

#### **5.12 CAA Section 110(a)(2)(L) – Permit Fees**

Section 110(a)(2)(L) requires SIPs to require the owner or operator of a major stationary source to pay fees to the permitting authority to cover the cost of reviewing, approving, implementing and enforcing a permit.

Arizona permitting agencies are responsible for assessing fees sufficient to recover the costs of administering the permitting program. Assessments include fees for permit actions, administrative and emission based fees for Title V sources, inspection fees for non-Title V sources, and fees for general

permits.

According to EPA issued Guidance<sup>27</sup>, “[t]he infrastructure SIP should provide citations to the regulations providing for collection of permitting fees under the state’s EPA-approved Title V permit program. See 40 CFR 70.9 (‘Fee determination and certification’), and 40 CFR Part 70, Appendix A, ‘Approval Status of State and Local Operating Permits Programs.’”

Arizona received interim approval for the federal Title V permit program, established by the 1990 federal Clean Air Act Amendment. 61 FR 55915 (October 30, 1996). The interim approval of the ADEQ Title V program became effective on Nov. 29, 1996. EPA fully approved the Title V operating permits programs for ADEQ, Maricopa County, Pima County, and Pinal County effective November 30, 2001. 66 FR 63175 (December 5, 2001) and 66 FR 63166 (December 5, 2001). Subsequently, on May 17, 2005, EPA issued a notice of deficiency with respect to certain elements of Maricopa County’s Title V operating permits program, including the permit fee requirements. 70 FR 32243 (June 2, 2005). Following EPA’s performance of a Title V program evaluation and the Maricopa County Air Quality Department’s (MCAQD) subsequent submittal of corrections to address the identified deficiencies, EPA issued a notice of resolution explaining EPA’s bases for concluding that the MCAQD had resolved all of the issues identified in EPA’s May 17, 2005 notice of deficiency. 71 FR 67061 (November 20, 2006). Thus, all of the Arizona permitting agencies currently implement fully approved fee programs under Title V of the CAA.

### **5.13 CAA Section 110(a)(2)(M) – Consultation/Participation by Affected Local Entities**

Section 110(a)(2)(M) requires states to provide for consultation and participation in SIP development by local political subdivisions affected by the plan.

Arizona air quality agencies consult with and maintain frequent and regular communication with all local and political subdivisions affected by plan revisions. Local entities participate in plan development and the review process and often provide needed data and information for analyses contained in the plan as well as implementation assistance. Opportunity for comment is also provided through stakeholder meetings and public hearings conducted to solicit testimony from the public, local planning agencies, and other local political entities prior to adoption of any plan revisions.

Relevant sections of Arizona Revised Statutes:

For ADEQ Programs:

49-104(A)(2), (A)(4), (B)(3) and (B)(5). Powers and duties of the department and director  
49-405(B)(2)(6). Attainment area designations  
49-406(C), (D), (E), (F). Nonattainment area plan  
49-424(8), (10). Duties of department  
49-425(B), (D). Rules; hearing

For County Programs:

49-473. Board of supervisors  
49-474. County control boards  
49-479. Rules; hearing

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<sup>27</sup> Guidance On Infrastructure State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS), dated October 14, 2011.

## **6.0 CONCLUSION**

This supplement to the Arizona SIP demonstrates that the existing authorities and infrastructure of Arizona State and local air quality management programs, in conjunction with the updated NSR/PSD SIP submitted for parallel processing on April 10, 2012, meet the basic program elements required under CAA Section 110(a)(2) for the 2006 PM<sub>2.5</sub> NAAQS, the 1997 8-hour ozone NAAQS, and the 1997 PM<sub>2.5</sub> NAAQS

**Appendix A**

*Statutes to be incorporated into the SIP*

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28-2153. Registration requirement; exceptions; assessment; violation; classification

A. A person shall not operate, move or leave standing on a highway a motor vehicle, trailer or semitrailer unless the motor vehicle, trailer or semitrailer has been registered with the department for the current registration year or is properly registered for the current registration year by the state or country of which the owner or lessee is a resident.

B. A resident shall not operate, move or leave standing on a highway a motor vehicle, trailer or semitrailer that is:

1. Owned by a nonresident and that is primarily under the control of a resident of this state for more than seven months unless the motor vehicle, trailer or semitrailer has been registered with the department for the current registration year.

2. Leased by the resident for more than twenty-nine days unless the motor vehicle, trailer or semitrailer has been registered with the department for the current registration year.

C. This section applies to a trailer or semitrailer without motive power unless the vehicle is disabled or is being towed as an abandoned vehicle at the direction of a law enforcement agency.

D. This section does not apply to:

1. A farm tractor.

2. A trailer used solely in the operation of a farm for transporting the unprocessed fiber or forage products of a farm or any implement of husbandry designed primarily for or used in agricultural operations and only incidentally operated or moved on a highway.

3. A road roller or road machinery, including a power sweeper, that is temporarily operating or moved on the highway.

4. An owner permitted to operate a vehicle under special provisions relating to lienholders, manufacturers, dealers and nonresidents.

5. Motorized or nonmotorized equipment designed primarily for and used in mining operations and only incidentally operated or moved on a highway.

6. A motor vehicle that is being towed by a tow truck that has been registered and for which a permit has been obtained pursuant to section 28-1108.

7. A golf cart used in the operation of a golf course or only incidentally operated or moved on a highway.

8. Wheeled equipment. For the purposes of this paragraph, "wheeled equipment" means:

(a) A compressor.

(b) A forklift or a hay squeeze machine that is designed to load hay in an off-road situation.

(c) A portable cement mixer.

(d) A single axle tow dolly as defined in section 28-1095.

(e) A tar pot.

(f) A water trailer used for watering livestock or for agricultural or domestic purposes.

(g) A welder.

(h) Any other similar item designed and used primarily for construction or building trade purposes.

9. An all-terrain vehicle or an off-road recreational motor vehicle operating on a dirt road that is located in an unincorporated area of this state. For the purposes of this paragraph, "dirt road" means an unpaved or ungraveled road that is not maintained by this state or a city, town or county of this state.

10. A person operating an off-highway vehicle who is participating in an off-highway vehicle special event as defined in section 28-1171.

11. An all-terrain vehicle or an off-highway vehicle as defined in section 28-1171 that is only incidentally operated or moved on a highway.

E. A person who owns or operates a trailer that is exempt from registration pursuant to subsection D, paragraph 2 of this section shall notify the county assessor of the exemption, and the assessor shall assess the trailer.

F. A person who violates subsection E of this section is guilty of a class 2 misdemeanor.

### 35-313. Investment of trust and treasury monies; loan of securities

A. The state treasurer shall invest and reinvest trust and treasury monies in any of the following items:

1. Obligations issued or guaranteed by the United States or any of its agencies, sponsored agencies, corporations, sponsored corporations or instrumentalities.

2. Collateralized repurchase agreements purchased from securities dealers that make markets in those securities listed in paragraph 1 of this subsection.

3. Bonds or other evidences of indebtedness of this state or any of the counties or incorporated cities, towns or duly organized school districts.

4. Commercial paper whose issuer is rated in one of the two highest rating categories for short-term obligations by any two nationally recognized statistical rating organizations.

5. Bills of exchange or time drafts known as bankers acceptances that are drawn on and accepted by a commercial bank.

6. Negotiable certificates of deposit issued by a nationally or state chartered bank or savings and loan association.

7. Bonds, debentures, notes or other evidences of indebtedness that are issued by entities organized and doing business in the United States and that carry as a minimum one of the Baa ratings of Moody's investors service or one of the BBB ratings of Standard and Poor's rating service or their successors.

8. Securities of or any other interests in any open-end or closed-end management type investment company or investment trust, including exchange traded funds whose underlying investments are invested in securities allowed by state law, registered under the investment company act of 1940 (54 Stat. 789; 15 United States Code sections 80a-1 through 80a-64), as amended. For any treasurer investment pool that seeks to maintain a constant share price, both of the following apply:

(a) The investment company or investment trust takes delivery of the collateral for any repurchase agreement either directly or through an authorized custodian.

(b) The investment policy of the investment company or investment trust includes seeking to maintain a constant share price.

9. Certificates of deferred property taxes as provided by section 42-17309.

10. Treasurer's warrant notes issued pursuant to section 35-185.01 or registered warrants of a county issued pursuant to section 11-605, if the yield is equal to or greater than yields on eligible investment instruments of comparable maturities.

11. Shares in the treasurer's local government investment pools pursuant to section 35-326 provided that investment policies of the pool seek to maintain a constant share price.

12. Shares in the treasurer's long-term local government investment pools, which terms are determined by the state board of investment, pursuant to section 35-326.01.

13. Subject to subsection D of this section, state transportation board funding obligations delivered pursuant to section 28-7678.

14. Certificates of deposit purchased in accordance with the procedures prescribed in section 35-323.01.

B. In case of default or failure to honor a county treasurer's warrant, the state treasurer may withhold the first state shared revenues that would otherwise be distributed to the defaulting county in the amount necessary to honor the note including accrued interest to and beyond the date of default.

C. The state treasurer may contract to loan securities owned by the trust funds and operating monies deposited in the investment pools pursuant to section 35-316, subsection B to the financial or dealer community through one or more of the entities listed in section 35-317, subsection A, or authorized by the board of investment pursuant to section 35-311, subsection E, if the borrower transfers collateral to the state treasurer or acting agent of the state in the form of cash or securities specified in subsection A of this section. Collateral posted in the form of cash shall be in an amount equal to at least one hundred per cent of the market value of the loaned securities as agreed. Collateral posted in the form of securities shall be in an amount of no more than one hundred ten per cent of the market value of the loaned securities as established from time to time by the board of investment. The loaned securities shall be valued as to market value daily, and, if necessary, the borrower shall post additional collateral, as agreed, to ensure that the required margin is maintained. The state treasurer may collect from the borrower all dividends, interest, premiums, rights and other distributions to which the lender of securities would otherwise be entitled. The state treasurer may terminate the contract on not less than five business days' notice, as agreed, and the borrower may terminate the contract on not less than two business days' notice, as agreed.

D. The state treasurer shall invest operating monies in state transportation board funding obligations delivered pursuant to section 28-7678 pursuant to the following:

1. The state treasurer shall liquidate investments of operating monies if necessary in order to invest in state transportation board funding obligations, except that if operating monies in the state general fund fall below an eight hundred million dollar average over the previous twelve consecutive months, the state treasurer is not required to purchase state transportation board funding obligations pursuant to this subsection.

2. Each series of state transportation board funding obligations shall bear interest at a fixed interest rate equal to the mean bid-ask price of the United States treasury obligation with a maturity date closest to the maturity date of the state

transportation board funding obligation as published most recently in the Wall Street Journal before the date the state treasurer receives a certificate from the state transportation board that states the board's determination to deliver an obligation to the state treasurer and the anticipated delivery date of the obligation. The delivery date shall be between fifteen and sixty days after the day the state treasurer receives the certificate.

3. The state treasurer shall provide written notice to the state transportation board and the director of the department of transportation when the operating monies fall below four hundred million dollars. If operating monies fall below two hundred million dollars, the state treasurer may call the investment in the state transportation board funding obligations in twenty-five million dollar increments up to the amount that the operating monies are below two hundred million dollars. The state treasurer shall give the state transportation board and the director of the department of transportation at least fifteen days' notice of the call.

#### 38-101. Definitions

In this title, unless the context otherwise requires:

1. "Office", "board" or "commission" means any office, board or commission of the state, or any political subdivision thereof, the salary or compensation of the incumbent or members of which is paid from a fund raised by taxation or by public revenue.
2. "Public institution" means any institution maintained and paid for from a fund raised by taxation or by public revenue.
3. "Officer" or "public officer" means the incumbent of any office, member of any board or commission, or his deputy or assistant exercising the powers and duties of the officer, other than clerks or mere employees of the officer.

#### 38-501. Application of article

A. This article shall apply to all public officers and employees of incorporated cities or towns, of political subdivisions and of the state and any of its departments, commissions, agencies, bodies or boards.

B. Notwithstanding the provisions of any other law, or the provisions of any charter or ordinance of any incorporated city or town to the contrary, the provisions of this article shall be exclusively applicable to all officers and employees of every incorporated city or town or political subdivision or the state and any of its departments, commissions, agencies, bodies or boards and shall supersede the provisions of any other such law, charter provision or ordinance.

C. Other prohibitions in the state statutes against any specific conflict of interests shall be in addition to this article if consistent with the intent and provisions of this article.

#### 38-502. Definitions

In this article, unless the context otherwise requires:

1. "Compensation" means money, a tangible thing of value or a financial benefit.
2. "Employee" means all persons who are not public officers and who are employed on a full-time, part-time or contract basis by an incorporated city or town, a political subdivision or the state or any of its departments, commissions, agencies, bodies or boards for remuneration.

3. "Make known" means the filing of a paper which is signed by a public officer or employee and which fully discloses a substantial interest or the filing of a copy of the official minutes of a public agency which fully discloses a substantial interest. The filing shall be in the special file established pursuant to section 38-509.
4. "Official records" means the minutes or papers, records and documents maintained by a public agency for the specific purpose of receiving disclosures of substantial interests required to be made known by this article.
5. "Political subdivision" means all political subdivisions of the state and county, including all school districts.
6. "Public agency" means:
  - (a) All courts.
  - (b) Any department, agency, board, commission, institution, instrumentality or legislative or administrative body of the state, a county, an incorporated town or city and any other political subdivision.
  - (c) The state, county and incorporated cities or towns and any other political subdivisions.
7. "Public competitive bidding" means the method of purchasing defined in title 41, chapter 4, article 3, or procedures substantially equivalent to such method of purchasing, or as provided by local charter or ordinance.
8. "Public officer" means all elected and appointed officers of a public agency established by charter, ordinance, resolution, state constitution or statute.
9. "Relative" means the spouse, child, child's child, parent, grandparent, brother or sister of the whole or half blood and their spouses and the parent, brother, sister or child of a spouse.
10. "Remote interest" means:
  - (a) That of a nonsalaried officer of a nonprofit corporation.
  - (b) That of a landlord or tenant of the contracting party.
  - (c) That of an attorney of a contracting party.
  - (d) That of a member of a nonprofit cooperative marketing association.
  - (e) The ownership of less than three per cent of the shares of a corporation for profit, provided the total annual income from dividends, including the value of stock dividends, from the corporation does not exceed five per cent of the total annual income of such officer or employee and any other payments made to him by the corporation do not exceed five per cent of his total annual income.
  - (f) That of a public officer or employee in being reimbursed for his actual and necessary expenses incurred in the performance of official duty.
  - (g) That of a recipient of public services generally provided by the incorporated city or town, political subdivision or state department, commission, agency, body or board of which he is a public officer or employee, on the same terms and conditions as if he were not an officer or employee.
  - (h) That of a public school board member when the relative involved is not a dependent, as defined in section 43-1001, or a spouse.
  - (i) That of a public officer or employee, or that of a relative of a public officer or employee, unless the contract or decision involved would confer a direct economic benefit or detriment upon the officer, employee or his relative, of any of the following:
    - (i) Another political subdivision.
    - (ii) A public agency of another political subdivision.

(iii) A public agency except if it is the same governmental entity.

(j) That of a member of a trade, business, occupation, profession or class of persons consisting of at least ten members which is no greater than the interest of the other members of that trade, business, occupation, profession or class of persons.

11. "Substantial interest" means any pecuniary or proprietary interest, either direct or indirect, other than a remote interest.

38-503. Conflict of interest; exemptions; employment prohibition

A. Any public officer or employee of a public agency who has, or whose relative has, a substantial interest in any contract, sale, purchase or service to such public agency shall make known that interest in the official records of such public agency and shall refrain from voting upon or otherwise participating in any manner as an officer or employee in such contract, sale or purchase.

B. Any public officer or employee who has, or whose relative has, a substantial interest in any decision of a public agency shall make known such interest in the official records of such public agency and shall refrain from participating in any manner as an officer or employee in such decision.

C. Notwithstanding the provisions of subsections A and B of this section, no public officer or employee of a public agency shall supply to such public agency any equipment, material, supplies or services, unless pursuant to an award or contract let after public competitive bidding, except that:

1. A school district governing board may purchase, as provided in sections 15-213 and 15-323, supplies, materials and equipment from a school board member.

2. Political subdivisions other than school districts may purchase through their governing bodies, without using public competitive bidding procedures, supplies, materials and equipment not exceeding three hundred dollars in cost in any single transaction, not to exceed a total of one thousand dollars annually, from a member of the governing body if the policy for such purchases is approved annually.

D. Notwithstanding subsections A and B of this section and as provided in sections 15-421 and 15-1441, the governing board of a school district or a community college district may not employ a person who is a member of the governing board or who is the spouse of a member of the governing board.

38-504. Prohibited acts

A. A public officer or employee shall not represent another person for compensation before a public agency by which the officer or employee is or was employed within the preceding twelve months or on which the officer or employee serves or served within the preceding twelve months concerning any matter with which the officer or employee was directly concerned and in which the officer or employee personally participated during the officer's or employee's employment or service by a substantial and material exercise of administrative discretion.

B. During the period of a public officer's or employee's employment or service and for two years thereafter, a public officer or employee shall not disclose or use for the officer's or employee's personal profit, without appropriate authorization, any information acquired by the officer or employee in the course of the officer's or employee's official duties which has been clearly designated to the officer or employee as confidential when such confidential designation is warranted because

of the status of the proceedings or the circumstances under which the information was received and preserving its confidentiality is necessary for the proper conduct of government business. A public officer or employee shall not disclose or use, without appropriate authorization, any information that is acquired by the officer or employee in the course of the officer's or employee's official duties and that is declared confidential by law.

C. A public officer or employee shall not use or attempt to use the officer's or employee's official position to secure any valuable thing or valuable benefit for the officer or employee that would not ordinarily accrue to the officer or employee in the performance of the officer's or employee's official duties if the thing or benefit is of such character as to manifest a substantial and improper influence on the officer or employee with respect to the officer's or employee's duties.

#### 38-505. Additional income prohibited for services

A. No public officer or employee may receive or agree to receive directly or indirectly compensation other than as provided by law for any service rendered or to be rendered by him personally in any case, proceeding, application, or other matter which is pending before the public agency of which he is a public officer or employee.

B. This section shall not be construed to prohibit the performance of ministerial functions including, but not limited to, the filing, or amendment of tax returns, applications for permits and licenses, incorporation papers, and other documents.

#### 38-506. Remedies

A. In addition to any other remedies provided by law, any contract entered into by a public agency in violation of this article is voidable at the instance of the public agency.

B. Any person affected by a decision of a public agency may commence a civil suit in the superior court for the purpose of enforcing the civil provisions of this article. The court may order such equitable relief as it deems appropriate in the circumstances including the remedies provided in this section.

C. The court may in its discretion order payment of costs, including reasonable attorney's fees, to the prevailing party in an action brought under subsection B.

#### 38-507. Opinions of the attorney general, county attorneys, city or town attorneys and house and senate ethics committee

Requests for opinions from either the attorney general, a county attorney, a city or town attorney, the senate ethics committee or the house of representatives ethics committee concerning violations of this article shall be confidential, but the final opinions shall be a matter of public record. The county attorneys shall file opinions with the county recorder, the city or town attorneys shall file opinions with the city or town clerk, the senate ethics committee shall file opinions with the senate secretary and the house of representatives ethics committee shall file opinions with the chief clerk of the house of representatives.

#### 38-508. Authority of public officers and employees to act

A. If the provisions of section 38-503 prevent an appointed public officer or a public employee from acting as required by law in his official capacity, such public officer

or employee shall notify his superior authority of the conflicting interest. The superior authority may empower another to act or such authority may act in the capacity of the public officer or employee on the conflicting matter.

B. If the provisions of section 38-503 prevent a public agency from acting as required by law in its official capacity, such action shall not be prevented if members of the agency who have apparent conflicts make known their substantial interests in the official records of their public agency.

#### 38-509. Filing of disclosures

Every political subdivision and public agency subject to this article shall maintain for public inspection in a special file all documents necessary to memorialize all disclosures of substantial interest made known pursuant to this article.

#### 38-510. Penalties

A. A person who:

1. Intentionally or knowingly violates any provision of sections 38-503 through 38-505 is guilty of a class 6 felony.

2. Recklessly or negligently violates any provision of sections 38-503 through 38-505 is guilty of a class 1 misdemeanor.

B. A person found guilty of an offense described in subsection A of this section shall forfeit his public office or employment if any.

C. It is no defense to a prosecution for a violation of sections 38-503 through 38-505 that the public officer or employee to whom a benefit is offered, conferred or agreed to be conferred was not qualified or authorized to act in the desired way.

D. It is a defense to a prosecution for a violation of sections 38-503 through 38-505 that the interest charged to be substantial was a remote interest.

#### 38-511. Cancellation of political subdivision and state contracts; definition

A. The state, its political subdivisions or any department or agency of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the departments or agencies of either is, at any time while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

B. Leases of state trust land for terms longer than ten years cancelled under this section shall respect those rights given to mortgagees of the lessee by section 37-289 and other lawful provisions of the lease.

C. The cancellation under this section by the state or its political subdivisions shall be effective when written notice from the governor or the chief executive officer or governing body of the political subdivision is received by all other parties to the contract unless the notice specifies a later time.

D. The cancellation under this section by any department or agency of the state or its political subdivisions shall be effective when written notice from such party is received by all other parties to the contract unless the notice specifies a later time.

E. In addition to the right to cancel a contract as provided in subsection A of this section, the state, its political subdivisions or any department or agency of either may recoup any fee or commission paid or due to any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any department or agency of either from any other party to the contract arising as the result of the contract.

F. Notice of this section shall be included in every contract to which the state, its political subdivisions, or any of the departments or agencies of either is a party.

G. For purposes of this section, "political subdivisions" do not include entities formed or operating under title 48, chapter 11, 12, 13, 17, 18, 19 or 22.

#### 49-103. Department employees; legal counsel

A. The director, subject to title 41, chapter 4, articles 5 and 6, shall employ, determine the conditions of employment and specify the duties of administrative, secretarial and clerical employees as he deems necessary.

B. The attorney general shall be the legal advisor of the department and shall give legal services as the department requires. Compensation for personnel assigned by the attorney general to perform such services shall be a charge against appropriations to the department. The attorney general shall prosecute and defend in the name of this state all actions necessary to carry out the provisions of this title.

#### 49-104. Powers and duties of the department and director

A. The department shall:

~~1. Formulate policies, plans and programs to implement this title to protect the environment.~~

2. Stimulate and encourage all local, state, regional and federal governmental agencies and all private persons and enterprises that have similar and related objectives and purposes, cooperate with those agencies, persons and enterprises and correlate department plans, programs and operations with those of the agencies, persons and enterprises.

~~3. Conduct research on its own initiative or at the request of the governor, the legislature or state or local agencies pertaining to any department objectives.~~

4. Provide information and advice on request of any local, state or federal agencies and private persons and business enterprises on matters within the scope of the department.

~~5. Consult with and make recommendations to the governor and the legislature on all matters concerning department objectives.~~

~~6. Promote and coordinate the management of air resources to assure their protection, enhancement and balanced utilization consistent with the environmental policy of this state.~~

~~7. Promote and coordinate the protection and enhancement of the quality of water resources consistent with the environmental policy of this state.~~

~~8. Encourage industrial, commercial, residential and community development that maximizes environmental benefits and minimizes the effects of less desirable environmental conditions.~~

~~9. Assure the preservation and enhancement of natural beauty and man-made scenic qualities.~~

~~10. Provide for the prevention and abatement of all water and air pollution including that related to particulates, gases, dust, vapors, noise, radiation, odor, nutrients and heated liquids in accordance with article 3 of this chapter and chapters 2 and 3 of this title.~~

~~11. Promote and recommend methods for the recovery, recycling and reuse or, if recycling is not possible, the disposal of solid wastes consistent with sound health, scenic and environmental quality policies. Beginning in 2014, the department shall report annually on its revenues and expenditures relating to the solid and hazardous waste programs overseen or administered by the department.~~

~~12. Prevent pollution through the regulation of the storage, handling and transportation of solids, liquids and gases that may cause or contribute to pollution.~~

~~13. Promote the restoration and reclamation of degraded or despoiled areas and natural resources.~~

~~14. Assist the department of health services in recruiting and training state, local and district health department personnel.~~

~~15. Participate in the state civil defense program and develop the necessary organization and facilities to meet wartime or other disasters.~~

~~16. Cooperate with the Arizona-Mexico commission in the governor's office and with researchers at universities in this state to collect data and conduct projects in the United States and Mexico on issues that are within the scope of the department's duties and that relate to quality of life, trade and economic development in this state in a manner that will help the Arizona-Mexico commission to assess and enhance the economic competitiveness of this state and of the Arizona-Mexico region.~~

~~17. Unless specifically authorized by the legislature, ensure that state laws, rules, standards, permits, variances and orders are adopted and construed to be consistent with and no more stringent than the corresponding federal law that addresses the same subject matter. This provision shall not be construed to adversely affect standards adopted by an Indian tribe under federal law.~~

~~B. The department, through the director, shall:~~

~~1. Contract for the services of outside advisers, consultants and aides reasonably necessary or desirable to enable the department to adequately perform its duties.~~

~~2. Contract and incur obligations reasonably necessary or desirable within the general scope of department activities and operations to enable the department to adequately perform its duties.~~

~~3. Utilize any medium of communication, publication and exhibition when disseminating information, advertising and publicity in any field of its purposes, objectives or duties.~~

~~4. Adopt procedural rules that are necessary to implement the authority granted under this title, but that are not inconsistent with other provisions of this title.~~

~~5. Contract with other agencies, including laboratories, in furthering any department program.~~

~~6. Use monies, facilities or services to provide matching contributions under federal or other programs that further the objectives and programs of the department.~~

~~7. Accept gifts, grants, matching monies or direct payments from public or private agencies or private persons and enterprises for department services and publications and to conduct programs that are consistent with the general purposes and objectives of this chapter. Monies received pursuant to this paragraph shall be~~

deposited in the department fund corresponding to the service, publication or program provided.

8. Provide for the examination of any premises if the director has reasonable cause to believe that a violation of any environmental law or rule exists or is being committed on the premises. The director shall give the owner or operator the opportunity for its representative to accompany the director on an examination of those premises. Within forty-five days after the date of the examination, the department shall provide to the owner or operator a copy of any report produced as a result of any examination of the premises.

9. Supervise sanitary engineering facilities and projects in this state, authority for which is vested in the department, and own or lease land on which sanitary engineering facilities are located, and operate the facilities, if the director determines that owning, leasing or operating is necessary for the public health, safety or welfare.

10. Adopt and enforce rules relating to approving design documents for constructing, improving and operating sanitary engineering and other facilities for disposing of solid, liquid or gaseous deleterious matter.

11. Define and prescribe reasonably necessary rules regarding the water supply, sewage disposal and garbage collection and disposal for subdivisions. The rules shall:

(a) Provide for minimum sanitary facilities to be installed in the subdivision and may require that water systems plan for future needs and be of adequate size and capacity to deliver specified minimum quantities of drinking water and to treat all sewage.

(b) Provide that the design documents showing or describing the water supply, sewage disposal and garbage collection facilities be submitted with a fee to the department for review and that no lots in any subdivision be offered for sale before compliance with the standards and rules has been demonstrated by approval of the design documents by the department.

12. Prescribe reasonably necessary measures to prevent pollution of water used in public or semipublic swimming pools and bathing places and to prevent deleterious conditions at such places. The rules shall prescribe minimum standards for the design of and for sanitary conditions at any public or semipublic swimming pool or bathing place and provide for abatement as public nuisances of premises and facilities that do not comply with the minimum standards. The rules shall be developed in cooperation with the director of the department of health services and shall be consistent with the rules adopted by the director of the department of health services pursuant to section 36-136, subsection H, paragraph 10.

13. Prescribe reasonable rules regarding sewage collection, treatment, disposal and reclamation systems to prevent the transmission of sewage borne or insect borne diseases. The rules shall:

(a) Prescribe minimum standards for the design of sewage collection systems and treatment, disposal and reclamation systems and for operating the systems.

(b) Provide for inspecting the premises, systems and installations and for abating as a public nuisance any collection system, process, treatment plant, disposal system or reclamation system that does not comply with the minimum standards.

(c) Require that design documents for all sewage collection systems, sewage collection system extensions, treatment plants, processes, devices, equipment,

~~disposal systems, on-site wastewater treatment facilities and reclamation systems be submitted with a fee for review to the department and may require that the design documents anticipate and provide for future sewage treatment needs.~~

~~(d) Require that construction, reconstruction, installation or initiation of any sewage collection system, sewage collection system extension, treatment plant, process, device, equipment, disposal system, on-site wastewater treatment facility or reclamation system conform with applicable requirements.~~

~~14. Prescribe reasonably necessary rules regarding excreta storage, handling, treatment, transportation and disposal. The rules shall:~~

~~(a) Prescribe minimum standards for human excreta storage, handling, treatment, transportation and disposal and shall provide for inspection of premises, processes and vehicles and for abating as public nuisances any premises, processes or vehicles that do not comply with the minimum standards.~~

~~(b) Provide that vehicles transporting human excreta from privies, septic tanks, cesspools and other treatment processes shall be licensed by the department subject to compliance with the rules. The department may require payment of a fee as a condition of licensure. After the effective date of this amendment to this section, the department shall establish by rule a fee as a condition of licensure, including a maximum fee. As part of the rule making process, there must be public notice and comment and a review of the rule by the joint legislative budget committee. After September 30, 2013, the department shall not increase that fee by rule without specific statutory authority for the increase. The fees shall be deposited, pursuant to sections 35-146 and 35-147, in the solid waste fee fund established by section 49-881.~~

~~15. Perform the responsibilities of implementing and maintaining a data automation management system to support the reporting requirements of title III of the superfund amendments and reauthorization act of 1986 (P.L. 99-499) and title 26, chapter 2, article 3.~~

~~16. Approve remediation levels pursuant to article 4 of this chapter.~~

~~17. Establish or revise fees by rule pursuant to the authority granted under title 44, chapter 9, article 8 and chapters 4 and 5 of this title for the department to adequately perform its duties. All fees shall be fairly assessed and impose the least burden and cost to the parties subject to the fees. In establishing or revising fees, the department shall base the fees on:~~

~~(a) The direct and indirect costs of the department's relevant duties, including employees salaries and benefits, professional and outside services, equipment, in-state travel and other necessary operational expenses directly related to issuing licenses as defined in title 41, chapter 6 and enforcing the requirements of the applicable regulatory program.~~

~~(b) The availability of other funds for the duties performed.~~

~~(c) The impact of the fees on the parties subject to the fees.~~

~~(d) The fees charged for similar duties performed by the department, other agencies and the private sector.~~

~~C. The department may:~~

~~1. Charge fees to cover the costs of all permits and inspections it performs to ensure compliance with rules adopted under section 49-203, except that state agencies are exempt from paying the fees. Monies collected pursuant to this~~

subsection shall be deposited, pursuant to sections 35-146 and 35-147, in the water quality fee fund established by section 49-210.

~~2. Contract with private consultants for the purposes of assisting the department in reviewing applications for licenses, permits or other authorizations to determine whether an applicant meets the criteria for issuance of the license, permit or other authorization. If the department contracts with a consultant under this paragraph, an applicant may request that the department expedite the application review by requesting that the department use the services of the consultant and by agreeing to pay the department the costs of the consultant's services. Notwithstanding any other law, monies paid by applicants for expedited reviews pursuant to this paragraph are appropriated to the department for use in paying consultants for services.~~

~~D. The director may:~~

~~1. If the director has reasonable cause to believe that a violation of any environmental law or rule exists or is being committed, inspect any person or property in transit through this state and any vehicle in which the person or property is being transported and detain or disinfect the person, property or vehicle as reasonably necessary to protect the environment if a violation exists.~~

~~2. Authorize in writing any qualified officer or employee in the department to perform any act that the director is authorized or required to do by law.~~

#### 49-106. Statewide application of rules

The rules adopted by the department apply and shall be observed throughout this state, or as provided by their terms, and the appropriate local officer, council or board shall enforce them. This section does not limit the authority of local governing bodies to adopt ordinances and rules within their respective jurisdictions if those ordinances and rules do not conflict with state law and are equal to or more restrictive than the rules of the department, but this section does not grant local governing bodies any authority not otherwise provided by separate state law.

#### 49-107. Local delegation of state authority

A. The director may delegate to a local environmental agency, county health department, public health services district or municipality any functions, powers or duties which the director believes can be competently, efficiently and properly performed by the local agency if the local agency accepts the delegation and agrees to perform the delegated functions, powers and duties according to the standards of performance required by law and prescribed by the director.

B. Monies appropriated or otherwise made available to the department for distribution to local agencies may be allocated or reallocated in a manner designed to assure that the recognized local activities and the delegated functions, powers and duties are accomplished according to the applicable standards of performance.

C. The director may terminate, for cause, all or part of the delegation and reallocate all or part of any monies that may have been conditioned on the further performance of the delegated functions, powers and duties.

#### 49-405. Attainment area designations

A. The governor may designate the status and classification of areas of this state with respect to attainment of national ambient air quality standards.

B. The director shall adopt rules that both:

1. Describe the geographic extent of attainment, nonattainment or unclassifiable areas of this state for all pollutants for which a national ambient air quality standard exists.

2. Establish procedures and criteria for changing the designations of areas that include all of the following:

(a) Technical bases for proposed changes, including ambient air quality data, types and distributions of sources of air pollution, population density and projected population growth, transportation system characteristics, traffic congestion, projected industrial and commercial development, meteorology, pollution transport and political boundaries.

(b) Provisions for review of and public comment on proposed changes to area designations.

(c) All area designations adopted by the administrator as of May 30, 1992.

C. On promulgation by the administrator of new or revised national ambient air quality standards for pollutants, the department shall develop proposed recommendations regarding designations for geographic areas of this state as being in attainment or nonattainment or unclassifiable with respect to that standard. The proposed recommendations shall be provided to the governor to assist the governor in submitting recommendations to the administrator pursuant to 42 United States Code section 7407(d)(1)(A). The department shall develop the proposed recommendations as follows:

1. No earlier than five months before the date by which the governor must make the recommendations and no later than four months before that date, the department shall complete a draft of the proposed recommendations and a technical support document that explains the scientific and other bases for the draft proposal.

2. No earlier than five months before the date by which the governor must make the recommendations and no later than four months before that date, the department shall post the draft proposed recommendations and technical support document on the department's website. The department shall provide actual notice of the posting to counties and municipalities that would be included in a nonattainment area under the proposed recommendations and to any person who had previously requested actual notice of the draft documents. Actual notice of the posting may be provided by electronic or other means.

3. The website posting and actual notices prescribed in paragraph 2 of this subsection shall include notice that until the close of the comment period, any person may submit written comments to the department regarding the draft proposed recommendations and technical support document. The notice shall also include the date, time and location of a public hearing for the department to receive verbal comments and answer questions concerning the draft proposal. The written comment period shall close and the hearing shall be held no later than forty-six days before the date by which the governor must make the recommendations.

4. After the close of the comment period and after the public hearing and not later than one month before the date by which the governor must make the recommendations, the department shall finalize the proposed recommendations and technical support document and submit them to the governor. The

department's final proposed recommendations and technical support document shall:

(a) Consider the comments received by the department pursuant to paragraph 3 of this subsection. For any area that is proposed to be designated a nonattainment area in the final proposed recommendations, the department shall with the submittal to the governor include a responsiveness summary that explains with reasonable particularity the department's consideration of and responses to comments received pursuant to paragraph 3 of this subsection.

(b) Be posted on the department's website within five days after the department's submittal to the governor. The posting shall include any responsiveness summary, and the department shall provide actual notice of the posting to counties and municipalities that would be included in a nonattainment area under the final proposed recommendations and to any person who had previously requested actual notice of the documents. Actual notice of the posting may be provided by electronic or other means.

D. The department shall post on its website a copy of the governor's recommendations within five days after the recommendations are submitted to the administrator.

E. If the administrator requires the governor's recommendations to be submitted six months after promulgation of the new or revised national ambient air quality standards or earlier, the time frames prescribed in subsections C and D shall be reduced by one-half.

#### 49-421. Definitions

In this article, unless the context otherwise requires:

1. "Air contaminants" includes smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, wind-borne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.

2. "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the director.

3. "Person" includes any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

4. "Special inspection warrant" means an order in writing issued in the name of the state of Arizona, signed by a magistrate, directed to the director or his deputies, authorizing him to enter into or upon any public or private property for the purpose of making an inspection authorized by law.

#### 49-422. Powers and duties

A. In addition to any other powers vested in it by law, the department may:

1. Accept, receive and administer grants or other funds or gifts from public and private agencies, including the federal government, to carry out any of the purposes of this chapter. All monies resulting therefrom shall be deposited, pursuant to sections 35-146 and 35-147, in the account of the department.
  2. Secure necessary scientific, technical, administrative and operational services, including laboratory facilities, by contract or otherwise to carry out the purposes of this chapter.
  3. Require, as specified in subsections B and C of this section, any source of air contaminants to monitor, sample or perform other studies to quantify emissions of air contaminants or levels of air pollution that may reasonably be attributable to that source, if the director either:
    - (a) Determines that monitoring, sampling or other studies are necessary to determine the effects of the source on levels of air pollution.
    - (b) Has reasonable cause to believe a violation of this chapter, rules adopted pursuant to this chapter or a permit issued pursuant to this chapter has been committed.
    - (c) Determines that those studies or data are necessary to accomplish the purposes of this chapter, and that the monitoring, sampling or other studies by the source are necessary in order to assess the impact of the source on the emission of air contaminants.
- B. The director shall adopt rules requiring sources of air contaminants to monitor, sample or otherwise quantify their emissions of air pollution that may reasonably be attributable to such sources for air contaminants for which ambient air quality standards or emission standards or design, equipment, work practice or operational standards have been adopted pursuant to section 49-424 or section 49-425, subsection A. In the development of the rules, the director shall consider the cost and effectiveness of the monitoring, sampling or other studies.
- C. For those sources of air contaminants for which rules are not required to be adopted pursuant to subsection B of this section, the director may require a source of air contaminants, by permit or order, to perform monitoring, sampling or other quantification of its emissions or air pollution that may reasonably be attributed to such a source. Before requiring such monitoring, sampling or other quantification by permit or order, the director shall consider the relative cost and accuracy of any alternatives that may be reasonable under the circumstances such as emission factors, modeling, mass balance analyses or emissions projections. The director may require such monitoring, sampling or other quantification by permit or order if the director determines in writing that all of the following conditions are met:
1. The actual or potential emissions or air pollution may adversely affect public health or the environment.
  2. A monitoring, sampling or quantification method is technically feasible for the subject contaminant and the source.
  3. An adequate scientific basis for the monitoring, sampling or quantification method exists.
  4. The monitoring, sampling or quantification method is reasonably accurate.
  5. The cost of the method is reasonable in light of the use to be made of the data.
- D. In determining the frequency and duration of monitoring, sampling or quantification of emissions under subsections B and C of this section, the director

shall consider the five factors prescribed in subsection C of this section and the level of emissions from the source.

E. Orders issued and permit conditions imposed pursuant to this section may be appealed as appealable agency actions pursuant to title 41, chapter 6, article 10.

F. On request of the on-scene commander or the department of health services, the department of environmental quality shall assist at a significant chemical or other toxic fire event, excluding chemical or nuclear warfare or biological agents, and shall provide the following services if funding is available and if the director, in the director's professional capacity, determines the department's provision of services is necessary to protect human health and the environment:

1. Collect air samples for likely contaminants resulting from the fire. The department of environmental quality shall coordinate sampling locations, times and pollutants to be sampled with the department of health services and other appropriate health and emergency response officials.
2. Maintain an hourly plume report that includes meteorological conditions that affect dispersal of smoke.
3. In consultation with the department of health services and the on-scene coordinator, prepare a report that includes test results of any sampling, including the sampling rationale and protocol and chain of custody report using applicable environmental protection agency standards. The report shall also include, to the extent practicable, a smoke dispersion map with detail adequate to determine possible areas of impact at the level of detail practicable and a listing of likely releases of any chemical that is categorized by the United States environmental protection agency as a hazardous air pollutant and the corresponding environmental protection agency description of possible health effects of the chemical based on a reliable inventory of hazardous materials at the site or facility.

#### 49-424. Duties of department

The department shall:

1. Determine whether the meteorology of the state is such that airsheds can be reasonably identified and air pollution, therefore, can be controlled by establishing air pollution control districts within well defined geographical areas.
2. Make continuing determinations of the quantity and nature of emissions of air contaminants, topography, wind and temperature conditions, possible chemical reactions in the atmosphere, the character of development of the various areas of the state, the economic effect of remedial measures on the various areas of the state, the availability, use and economic feasibility of air-cleaning devices, the effect on human health and danger to property from air contaminants, the effect on industrial operations of remedial measures and other matters necessary to arrive at a better understanding of air pollution and its control. In a county with a population in excess of one million two hundred thousand persons according to the most recent United States decennial census, the department shall locate a monitoring system in at least two remote geographic sites.
3. Establish substantive policy statements for identifying air quality exceptional events that take into consideration this state's unique geological, geographical and climatological conditions and any other unusual circumstances. These substantive policy statements shall be developed with the planning agency certified pursuant to

section 49-406, subsection A and the county air pollution control department or district.

4. Determine the standards for the quality of the ambient air and the limits of air contaminants necessary to protect the public health, and to secure the comfortable enjoyment of life and property by the citizens of the state or in any defined geographical area of the state where the concentration of air pollution sources, the health of the population, or the nature of the economy or nature of land and its uses so require, and develop and transmit to the county boards of supervisors minimum state standards for air pollution control.

5. Conduct investigations, inspections and tests to carry out the duties of this section under the procedures established by this article.

6. Hold hearings relating to any aspect of or matter within the duties of this section, and in connection therewith, compel the attendance of witnesses and the production of records under the procedures established by section 49-432.

7. Prepare and develop a comprehensive plan or plans for the abatement and control of air pollution in this state.

8. Encourage voluntary cooperation by advising and consulting with persons or affected groups or other states to achieve the purposes of this chapter, including voluntary testing of actual or suspected sources of air pollution.

9. Encourage political subdivisions of the state to handle air pollution problems within their respective jurisdictions, and provide as it deems necessary technical and consultative assistance therefor.

10. Compile and publish from time to time reports, data and statistics with respect to those matters studied and investigated by the department.

11. Develop and disseminate air quality dust forecasts for the Maricopa county PM-10 nonattainment area. Each forecast shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. At a minimum, the forecasts shall be posted on the department's website and distributed electronically. When developing these forecasts, the department shall consider all of the following:

(a) Projected meteorological conditions for the Maricopa county area, including all of the following:

(i) Wind speed and direction.

(ii) Stagnation.

(iii) Recent precipitation.

(iv) Potential for precipitation.

(b) Existing concentrations of air pollution at the time of the forecast.

(c) Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.

#### 49-425. Rules; hearing

A. The director shall adopt such rules as he determines are necessary and feasible to reduce the release into the atmosphere of air contaminants originating within the territorial limits of the state or any portion thereof and shall adopt, modify, and amend reasonable standards for the quality of, and emissions into, the ambient air of the state for the prevention, control and abatement of air pollution. Additional standards shall be established for particulate matter emissions, sulfur dioxide

emissions, and other air contaminant emissions determined to be necessary and feasible for the prevention, control and abatement of air pollution. In fixing such ambient air quality standards, emission standards or standards of performance, the director shall give consideration but shall not be limited to the relevant factors prescribed by the clean air act.

B. No rule may be enacted or amended except after the director first holds a public hearing after twenty days' notice of such hearing. The proposed rule, or any proposed amendment of a rule, shall be made available to the public at the time of notice of such hearing.

C. The department shall enforce the rules adopted by the director.

D. All rules enacted pursuant to this section shall be made available to the public at a reasonable charge upon request.

#### 49-433. Special inspection warrant

A. The director and his deputies charged under this chapter or the rules and regulations adopted pursuant to this chapter with powers or duties involving inspection of real or personal property including buildings, building premises and building contents for the purpose of air pollution control shall be authorized to present themselves before a magistrate and apply for, obtain and execute special inspection warrants. Such inspections shall be limited to property other than the interior or structures used as private residences.

B. Upon showing by the affidavit of the director or his deputies that consent to entry for inspection purposes has been refused or circumstances justify the failure to seek such consent, special inspection warrants may be issued by a magistrate for inspection of public or private, real or personal properties. Such warrants shall not be necessary in the case of an emergency where there is an imminent and substantial endangerment to the health of persons.

C. The warrant shall be in substantially the following form: "County of \_\_\_\_\_, state of Arizona to the director or any deputy director in the state of Arizona, proof by affidavit having been this day made before me by (person or persons whose affidavit has been taken) that in and upon certain premises in the (city, town or county) of \_\_\_\_\_ and more particularly described as follows: (describe the premises with reasonable particularity) there now exists a reasonable governmental interest to determine if such premises comply with (section \_\_\_\_\_ of the Arizona Revised Statutes) and/or (section \_\_\_\_\_ of regulation or ordinance). You are therefore commanded in the day time (or during reasonable business hours), to make an inspection of said premises as soon as practicable. Date, signature and title of office." The endorsement on the warrant shall be in substantially the following form: "Received by me \_\_\_\_\_, 19\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_\_. (Name of director or deputy director)." The return of officer shall be in substantially the following form: "I hereby certify that by virtue of the within warrant I searched the named premises and found the following things (describe findings). Dated this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_ (Name of director or deputy director)."

D. The warrant may be served by the director or his deputies mentioned in its directions, but by no other person except in aid of the director or his deputies, on

his requiring it, the director or his deputies being present and acting in its execution.

E. A warrant shall be executed and returned to the magistrate who issued it within ten days after its date. After the expiration of that time, the warrant shall unless executed be void.

F. Any person who wilfully refuses to permit an inspection lawfully authorized by warrant issued pursuant to this article is guilty of a petty offense.

49-435. Hearings on orders of abatement

An order of abatement issued by the director shall become effective immediately upon the expiration of the time during which a request for a hearing may be made pursuant to section 49-461 unless the person or persons named in the order have appealed the order of abatement as an appealable agency action pursuant to title 41, chapter 6, article 10.

49-441. Suspension and revocation of conditional order

If the terms and conditions of the conditional order are being violated, the director may seek to revoke or suspend the conditional order granted. In such event, the director shall serve notice of such violation on the holder of the conditional order in the manner provided in section 49-444. The notice shall specify the nature of such violation and the date on which a hearing will be held to determine if such a violation has occurred and whether the conditional order should be suspended or revoked. The date of the hearing shall be within thirty days from the date the notice is served upon the holder of the conditional order.

49-455. Permit administration fund

A. A permit administration fund is established consisting of fees and interest collected pursuant to this article. The director shall administer the fund subject to annual legislative appropriation. On notice from the director, the state treasurer shall invest and divest monies in the fund as provided in section 35-313, and monies earned from investment shall be credited to the fund. Monies in the fund are exempt from the provisions of section 35-190 relating to lapsing of appropriations.

B. Monies in the fund collected pursuant to sections 49-426 and 49-426.01 shall be used for the following:

~~1. In the case of fees collected pursuant to section 49-426, subsection E, paragraph 1, all reasonable direct and indirect costs required to develop and administer the permit program requirements of title V of the clean air act.~~

2. In the case of other fees, administering permits or revisions issued pursuant to section 49-426 or 49-426.01 or conducting inspections.

~~C. No more than five per cent of the monies in the fund may be used for the collection of monies, unless otherwise provided under title V of the clean air act.~~

~~D. No more than five per cent of the monies in the fund may be used for general administration of the fund unless otherwise provided under title V of the clean air act.~~

49-460. Violations; production of records

When the director has reasonable cause to believe that any person has violated or is in violation of any provision of this article, any rule adopted pursuant to this article or any requirement of a permit issued pursuant to this article, he may request in writing that such person produce all existing books, records and other documents evidencing tests, inspections or studies which may reasonably relate to compliance or noncompliance with rules adopted pursuant to this article.

49-461. Violations; order of abatement

When the director has reasonable cause to believe that any person has violated or is in violation of any provision of this article, any rule adopted pursuant to this article or any requirement of a permit issued pursuant to this article, he may serve upon such person by certified mail or in person an order of abatement or may file a complaint in superior court alleging a violation pursuant to section 49-463. The order shall state with particularity the act constituting the violation, shall state in its entirety the specific requirement, provision or rule violated, shall state the duration of the order and shall state that the alleged violator is entitled to a hearing, if such hearing is requested in writing within thirty days after the date of issuance of the order. The order may be conditional and require a person to refrain from particular acts unless certain conditions are met. An order issued under this section shall require the persons to whom it is issued to comply with the requirement, provision or rule as expeditiously as practicable. In the case of a source required to obtain a permit pursuant to this article and title V of the clean air act, the order shall require compliance no later than one year after the date the order was issued and may be renewable for no more than one additional year on a showing of good cause to the director.

49-462. Violations; injunctive relief

The attorney general, at the request of the director, shall file an action for a temporary restraining order, a preliminary injunction, a permanent injunction or any other relief provided by law, if the director has reasonable cause to believe that any of the following is occurring:

1. A person has violated or is in violation of any provision of this article, a rule adopted pursuant to this article or a permit issued pursuant to this article.
2. A person has violated or is in violation of an effective order of abatement.
3. A person is creating an imminent and substantial endangerment to the public health or the environment because of a release of a harmful air contaminant, unless that release is subject to enforcement under title 3, chapter 2, article 6.

49-463. Violations; civil penalties

A. A person who violates any provision of this article, any permit or permit condition issued pursuant to this article, any fee or filing requirement, any rule adopted pursuant to this article, an effective order of abatement issued pursuant to this article or any duty to allow or carry out inspection, entry or monitoring activities, is subject to a civil penalty of not more than ten thousand dollars per day per violation. The attorney general at the request of the director shall file an action in superior court to recover penalties provided for in this section.

B. For purposes of determining the number of days of violation for which a civil penalty may be assessed under this section, if the director has notified the source

of the violation and makes a prima facie showing that the conduct or events giving rise to the violation are likely to have continued or recurred past the date of notice, the days of violation shall be presumed to include the date of such notice and each day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by a preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature. Notice under this section is accomplished by the issuance of a notice of violation or order of abatement or by filing a complaint in superior court that alleges any violation described in subsection A.

C. In determining the amount of a civil penalty under this section, the court shall consider all of the following:

1. The seriousness of the violation.
2. As an aggravating factor only, the economic benefit, if any, resulting from the violation.
3. Any history of that violation.
4. Any good faith efforts to comply with the applicable requirements.
5. The economic impact of the penalty on the violator.
6. The duration of the violation as established by any credible evidence including evidence other than the applicable test method.
7. Payment by the violator of penalties previously assessed for the same violation.
8. Other factors the court deems relevant.

D. All penalties collected pursuant to this section shall be deposited, pursuant to sections 35-146 and 35-147, in the state general fund.

#### 49-465. Air pollution emergency

A. If the director determines that air pollution in any area constitutes or may constitute an emergency risk to the health of those in the area or that national ambient air quality standards are likely to be exceeded, such determination shall be communicated to the governor. The governor may, by proclamation, declare that an emergency exists and may prohibit, restrict or condition the following:

1. Motor vehicle traffic.
2. The operation of retail, commercial, manufacturing, governmental, industrial, or similar activity.
3. Operation of incinerators.
4. The burning or other consumption of fuels.
5. The burning of any materials whatsoever.
6. Any and all other activity which contributes or may contribute to the emergency.

B. If the governor declares that an emergency exists pursuant to subsection A, the governor shall prohibit, restrict or condition the employment schedules for employees of this state and its political subdivisions, and on a voluntary basis only, may encourage private employers to develop similar work rules to restrict vehicle emissions during air quality emergencies. Any unscheduled leave that an employee of this state or its political subdivisions is required to take because of the prohibition, restriction or condition shall be leave with pay.

C. Orders of the governor shall be enforced by the department and the state and local police and air pollution enforcement personnel forces. Those authorized to enforce the orders may use reasonable force required in the enforcement of the

orders, and may take reasonable steps required to assure compliance, including but not limited to the following:

1. Enter upon any property or establishment believed to be violating the order and, if a request does not produce compliance, cause compliance with such order.
2. Stopping, detouring, rerouting, and prohibiting vehicle traffic.
3. Disconnecting incinerator or other types of combustion facilities.

#### 49-471. Definitions

In this article, unless the context otherwise requires:

1. "Advisory council" means any county air pollution control advisory council established pursuant to this article.
2. "Air contaminants" includes smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, wind-borne matter, radioactive materials or noxious chemicals, or any other material in the outdoor atmosphere.
3. "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances, by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the board of supervisors.
4. "Appealable agency action":
  - (a) Means an action that determines the legal rights, duties or privileges of a party.
  - (b) Does not include any rule, ordinance, order, standard or statement of policy of general application issued by a control officer or board of supervisors to implement, interpret or make specific the legislation enforced or administered by the control officer or board of supervisors.
  - (c) Does not mean or include any rule that relates to the internal management of a county and that does not affect private rights or interests.
  - (d) Does not include a decision or action that must be appealed to the hearing board pursuant to section 49-476.01, 49-480.02, 49-482, 49-490 or 49-511 or to a final administrative decision obtained by an administrative appeal under section 49-471.15.
5. "Board of supervisors" means any county board of supervisors.
6. "Control officer" means the executive head of the department authorized or designated to enforce air pollution regulations, or the executive head of an air pollution control district established pursuant to section 49-473.
7. "Final rule" or "final ordinance" means any rule or ordinance approved by the board of supervisors.
8. "Hearing board" means any county air pollution hearing board established pursuant to this article.
9. "Permit" includes all or any part of a county permit, license, certificate, approval, registration, charter or similar form of permission required by law.
10. "Permitting" includes the county process for granting, denying, renewing, revoking, suspending, annulling, withdrawing or amending a permit.

11. "Person" includes any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

12. "Provision of law" means all or any part of the federal or state constitution or of any federal or state statute, court rule, executive order or rule or ordinance adopted by a board of supervisors.

13. "Register" means the Arizona administrative register.

14. "Rule" or "ordinance":

(a) Means a county statement of general applicability that is adopted by a board of supervisors and that implements, interprets or prescribes law or policy or that describes the procedure of a county.

(b) Includes prescribing fees or the amendment or repeal of a prior rule or ordinance.

(c) Does not include intra-agency memoranda.

15. "Rule or ordinance making" means the process for formulation and adoption of a rule or ordinance.

16. "Special inspection warrant" means an order in writing issued in the name of the state of Arizona, signed by a magistrate, directed to the control officer or the control officer's deputies and authorizing the control officer or the control officer's deputies to enter into or upon public or private property for the purpose of making an inspection authorized by law.

17. "Substantive policy statement":

(a) Means a written expression that informs the general public of a current approach to, or opinion of, the requirements of the federal or state constitution, a federal or state statute, a federal, state or county administrative rule, ordinance or regulation or a final judgment of a court of competent jurisdiction, including, if appropriate, the control officer's current practice, procedure or method of action based on that approach or opinion.

(b) Is advisory only.

(c) Does not include internal procedural documents that only affect internal procedures of the county and that do not impose additional requirements or penalties on regulated parties, confidential information or rules or ordinances adopted pursuant to this chapter.

#### 49-473. Board of supervisors

A. The board of supervisors of a county, in order to conserve and promote the public health, safety, and general welfare, shall within its territorial limits, or any portion thereof, investigate the degree to which the atmosphere of the county is contaminated by air pollution and the causes, sources, and extent of such air pollution or, if the state is developing a study in the county pursuant to section 49-424, cooperate with and assist the state in such a study.

B. The board of supervisors of a county shall authorize or designate an existing department of the county government or establish an air pollution control district to carry out the necessary investigations, inspections, and enforcement of any rules and regulations adopted pursuant to this article.

C. The board of supervisors of a county may in lieu of the provisions of subsection B, in addition to the joint exercise of powers provided for in title 11, chapter 7,

article 3, establish a multi-county air quality control region with one or more other counties by agreement with the board of supervisors of such other county or counties, and contract for the joint administration of this article within such region, including, but not limited to, the joint adoption of regulations and standards and the enforcement thereof by a joint region hearing board. Any region created under this subsection shall be governed by all of the provisions applicable to a county.

#### 49-474. County control boards

The board of supervisors of each county may authorize the board of health or health department of their respective counties in cooperation with the department of environmental quality to:

1. Study the problem of air pollution in the county.
2. Study possible effects on adjoining counties.
3. Cooperate with chambers of commerce, industry, agriculture, public officials and all other interested persons or organizations.
4. Hold public hearings if in their discretion such action is necessary.
5. The board of supervisors by resolution may establish an air pollution control district.

#### 49-476.01. Monitoring

A. The control officer may require, as specified in subsections B and C of this section, any source of air contaminants to monitor, sample or perform other studies to quantify emissions of air contaminants or levels of air pollution that may reasonably be attributable to that source, if the control officer either:

1. Determines that monitoring, sampling or other studies are necessary to determine the effects of the facility on levels of air pollution.
2. Has reasonable cause to believe a violation of this article, rules adopted pursuant to this article or a permit issued pursuant to this article has been committed.
3. Determines that those studies or data are necessary to accomplish the purposes of this article, and that the monitoring, sampling or other studies by the source are necessary in order to assess the impact of the source on the emission of air contaminants.

B. The board of supervisors shall adopt rules requiring sources of air contaminants to monitor, sample or otherwise quantify their emissions or air pollution that may reasonably be attributable to such sources for air contaminants for which ambient air quality standards or emission standards or design, equipment, work practice or operational standards have been adopted pursuant to section 49-424 or section 49-425, subsection A. In the development of the rules, the board shall consider the cost and effectiveness of the monitoring, sampling or other studies.

C. For those sources of air contaminants for which rules are not required to be adopted pursuant to subsection B of this section, the control officer may require a source of air contaminants, by permit or order, to perform monitoring, sampling or other quantification of its emissions or air pollution that may reasonably be attributed to such a source. Before requiring such monitoring, sampling or other quantification by permit or order, the control officer shall consider the relative cost and accuracy of any alternatives that may be reasonable under the circumstances such as emission factors, modeling, mass balance analyses or emissions projections. The control officer may require such monitoring, sampling or other

quantification by permit or order if the control officer determines in writing that all of the following conditions are met:

1. The actual or potential emissions of air pollution may adversely affect public health or the environment.
  2. An adequate scientific basis for the monitoring, sampling or quantification method exists.
  3. The monitoring, sampling or quantification method is technically feasible for the subject contaminant and the source.
  4. The monitoring, sampling or quantification method is reasonably accurate.
  5. The cost of the method is reasonable in light of the use to be made of the data.
- D. In determining the frequency and duration of monitoring, sampling or quantification of emissions under subsection B and C of this section, the control officer shall consider the five factors prescribed in subsection C of this section and the level of emissions from the source.
- E. Orders issued or permit conditions imposed pursuant to this section shall be appealable to the hearing board in the same manner as that prescribed for orders of abatement in section 49-490 and for permit conditions in section 49-482.

#### 49-478. Hearing board

- A. The board of supervisors shall appoint an air pollution hearing board.
- B. The hearing board shall consist of five members. The five members shall be knowledgeable in the field of air pollution. At least one member of the board shall be an attorney licensed to practice law in this state. At least three members shall not have a substantial interest, as defined in section 38-502, in any person required to obtain a permit pursuant to this article. Each board member shall serve for a term of three years.
- C. The hearing board shall select a chairman and vice-chairman and such other officers as it deems necessary.
- D. The board of supervisors may authorize compensation for hearing board members, and may authorize reimbursement for subsistence and travel, including travel from and to their respective places of residence when on official business.

#### 49-479. Rules; hearing

- A. The board of supervisors shall adopt such rules as it determines are necessary and feasible to control the release into the atmosphere of air contaminants originating within the territorial limits of the county or multi-county air quality control region in order to control air pollution, which rules, except as provided in subsection C shall contain standards at least equal to or more restrictive than those adopted by the director. In fixing such standards, the board or region shall give consideration but shall not be limited to:
  1. The latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on health and welfare which may be expected from the presence of an air pollution agent, or combination of agents in the ambient air, in varying quantities.
  2. Atmosphere conditions and the types of air pollution agent or agents which, when present in the atmosphere, may interact with another agent or agents to produce an adverse effect on public health and welfare.

3. Securing, to the greatest degree practicable, the enjoyment of the natural attractions of the state and the comfort and convenience of the inhabitants.
- B. No rule may be enacted or amended except after the board of supervisors first holds a public hearing after twenty days' notice of such hearing. The proposed rule, or any proposed amendment of a rule, shall be made available to the public at the time of notice of such hearing.
- C. A county may adopt or amend a rule, emission standard, or standard of performance that is as stringent or more stringent than a rule, emission standard or standard of performance for similar sources adopted by the director only if the county complies with the applicable provisions of section 49-112.
- D. All rules enacted pursuant to this section shall be made available to the public at a reasonable charge upon request.

49-480.02. Appeals of permit actions

- A. Within thirty days after the control officer gives notice of approval, denial or revocation of a permit, the applicant or any person who submitted comments pursuant to section 49-480, may request an appeal as provided under section 49-482. The decision after that hearing constitutes the final permit action from which judicial review may be taken pursuant to title 12, chapter 7, article 6.
- B. Any person who has an interest that is or may be adversely affected may commence a civil action in superior court against the control officer alleging that the control officer has failed to act in a timely manner consistent with the requirements of section 49-480. No action may be commenced before sixty days after the plaintiff has given notice to the control officer of the plaintiff's intent to file. The court has jurisdiction to require the control officer to act without additional delay.

49-482. Appeals to hearing board

- A. Within thirty days after notice is given by the control officer of approval or denial of a permit, permit revision or conditional order, the applicant and any person who filed a comment on the permit or permit revision pursuant to section 49-480, subsection B and section 49-426, subsection D, or on the conditional order pursuant to section 49-492, subsection C, may petition the hearing board, in writing, for a public hearing, which shall be held within thirty days after receipt of the petition. The hearing board, after notice and a public hearing, may sustain, modify or reverse the action of the control officer.
- B. Any person having an interest that is or may be adversely affected may commence a civil action in superior court against the control officer alleging that the control officer has failed to act in a timely manner as provided in section 49-480, subsection B and section 49-426, subsection C. No action may be commenced before sixty days after the plaintiff has given notice to the control officer. The court has jurisdiction to require the control officer to act without additional delay.

49-488. Special inspection warrant

- A. The control officer and his deputies charged under this chapter or the rules and regulations adopted pursuant to this chapter with powers or duties involving inspection of real or personal property including buildings, building premises and building contents for the purpose of air pollution control shall be authorized to

present themselves before a magistrate and apply for, obtain and execute special inspection warrants. Such inspections shall be limited to property other than the interior of structures used as private residences.

B. Upon showing by the affidavit of the control officer or his deputies that consent to entry for inspection purposes has been refused or circumstances justify the failure to seek such consent, special inspection warrants may be issued by a magistrate for inspection of public or private, real or personal properties. Such warrants shall not be necessary in the case of an emergency where there is an imminent and substantial endangerment to the health of persons.

C. The warrant shall be in substantially the following form: "County of +++++, state of Arizona to any control officer or deputy control officer in the county of +++++ proof by affidavit having been this day made before me by (person or persons whose affidavit has been taken) that in and upon certain premises in the (city, town or county) of +++++ and more particularly described as follows: (describe the premises with reasonable particularity) there now exists a reasonable governmental interest to determine if said premises comply with (section +++++ of the Arizona Revised Statutes) and/or (section +++++ of regulation or ordinance), you are therefore commanded in the day time (or during reasonable business hours), to make an inspection of said premises as soon as practicable. Date, signature and title of office." The endorsement on the warrant shall be in substantially the following form: "Received by me +++++ 19++, at +++++ o'clock +++++ (name of control officer or deputy control officer)." The return of officer shall be in substantially the following form: "I hereby certify that by virtue of the within warrant I searched the named premises and found the following things (describe findings). Dated this +++++ day of +++++ 19++++ (name of control officer or deputy control officer)."

D. The warrant may be served by the control officer or his deputies mentioned in its directions, but by no other person except in aid of the control officer or his deputies, on his requiring it, the control officer or his deputies being present and acting in its execution.

E. A warrant shall be executed and returned to the magistrate who issued it within ten days after its date. After the expiration of that time, the warrant shall unless executed be void.

F. Any person who knowingly refuses to permit an inspection lawfully authorized by warrant issued pursuant to this article is guilty of a petty offense.

#### 49-490. Hearings on orders of abatement

A. An order of abatement issued by the control officer shall become effective immediately upon the expiration of the time during which a request for a hearing may be made pursuant to section 49-511 unless the person or persons named in such order shall have made a timely request for a hearing before the hearing board. If a hearing is requested, the hearing board shall hold the hearing within thirty days from receipt of the request unless such time is extended by the hearing board. Written notice of the time and place of the hearing shall be sent by the hearing board to the person or persons requesting the hearing and to the control officer at least fifteen days before the hearing.

B. If the board, after the hearing, determines that the act or acts set forth in the order constitute a violation of any provision of this article or of the rules adopted pursuant to this article or any requirement of a permit or conditional order issued pursuant to this article and that no conditional order is justified, the board shall affirm or modify the order for abatement. The order may be conditional and require a person to refrain from the particular act or acts unless certain conditions are met.

49-495. Suspension and revocation of conditional order

If the terms and conditions of the conditional order are being violated, the control officer may seek to revoke or suspend the conditional order granted. In such event, the control officer shall serve notice of such violation on the holder of the conditional order in the manner provided in section 49-498. The notice shall specify the nature of such violation and the date on which a hearing will be held by the hearing board to determine if such a violation has occurred and whether the conditional order should be suspended or revoked. The date of said hearing shall be within thirty days from the date said notice is served upon the holder of the conditional order.

49-502. Violation; classification

A. Any person who violates any provision of this article, any rule adopted pursuant to this article or any effective order of abatement, permit or permit condition issued pursuant to this article is guilty of a class 1 misdemeanor for each day the violation continues unless another classification is specifically prescribed in this article. Each day of violation shall constitute a separate offense. Peace officers and the control officer and his deputies shall have the authority to issue a notice to appear under the same conditions and procedures set forth in section 13-3903 for a violation of any provision of this article, any rule adopted pursuant to this article or any effective order of abatement, permit or permit condition issued pursuant to this article.

B. Any person who violates any provision of this article, any rule adopted pursuant to this article or any effective order of abatement, permit or permit condition issued pursuant to this article is subject to a civil penalty of not more than ten thousand dollars per day per violation. The county attorney, at the request of the control officer, may commence an action in superior court to recover civil penalties provided by this section. Penalties recovered pursuant to this section shall be deposited in the special public health fund prescribed in section 49-480.

C. In determining the amount of a fine or civil penalty under this section, the court shall consider:

1. The seriousness of the violation.
2. As an aggravating factor only, the economic benefit, if any, resulting from the violation.
3. Any history of such violation.
4. Any good faith efforts to comply with the applicable requirements.
5. The economic impact of the penalty on the violator.
6. Such other factors as the court deems relevant.

49-510. Violations; production of records

When the control officer has reasonable cause to believe that any person has violated or is in violation of any provision of this article, any rule adopted pursuant to this article or any requirement of a permit issued pursuant to this article, he may request, in writing, that such person produce all existing books, records and other documents evidencing tests, inspections or studies which may reasonably relate to compliance or noncompliance with rules adopted pursuant to this article.

49-511. Violations; order of abatement

A. When the control officer has reasonable cause to believe that any person has violated or is in violation of any provision of this article, any rule adopted pursuant to this article or any requirement of a permit issued pursuant to this article, the control officer may serve upon such person by certified mail or in person an order of abatement or may file a complaint in superior court alleging a violation pursuant to section 49-513.

B. Except as provided in subsection E of this section, an order issued pursuant to this section shall state the following:

1. With particularity, the act constituting the violation.
2. In its entirety, the certain requirement, provision or rule violated.
3. The duration of the order.
4. That the alleged violator is entitled to a hearing, if the hearing is requested in writing within thirty days after the date of issuance of the order.

C. The order may be conditional and require a person to refrain from particular acts unless certain conditions are met.

D. An order issued under this section shall require the persons to whom it is issued to comply with the requirement, provision or rule as expeditiously as practicable. In the case of a source required to obtain a permit pursuant to this article and title V of the clean air act, the order shall require compliance no later than one year after the date the order was issued and may be renewable for no more than one additional year on a showing of good cause to the control officer. The control officer shall report annually, by December 1, to the governor, the president of the senate, the speaker of the house of representatives and the director of the Arizona state library, archives and public records on the sources that are issued an order of abatement or a renewal pursuant to this section. The report shall include summary information about the source and the order. If the order was renewed, the report shall also include a summary of the justification for the renewal. The control officer shall publish the following information on the county's internet web site:

1. A notice that an abatement order has been issued pursuant to this section and summary information about the order.
2. A notice that an order of abatement has been renewed pursuant to this section and summary information about the renewal.

E. The control officer may enter into an order of abatement by consent. The control officer may agree to accept monetary payments as part of the negotiated terms of an order of abatement by consent. The terms of an order of abatement by consent shall be determined by the agreement of the parties.

49-512. Violations; injunctive relief

The county attorney, at the request of the control officer, shall file an action for a temporary restraining order, a preliminary injunction, a permanent injunction or

any other relief provided by law, if the control officer has reasonable cause to believe that any of the following is occurring:

1. A person has violated or is in violation of any provision of this article, a rule adopted pursuant to this article or a permit issued pursuant to this article.
2. A person has violated or is in violation of an effective order of abatement.
3. A person is creating an imminent and substantial endangerment to the public health or the environment because of a release of a harmful air contaminant, unless that release is subject to enforcement under title 3, chapter 2, article 6.

49-513. Violations; civil penalties

A. A person who violates any provision of this article, any permit or permit condition issued pursuant to this article, any fee or filing requirement, any rule adopted pursuant to this article, an effective order of abatement issued pursuant to this article or any duty to allow or carry out inspection, entry or monitoring activities, is subject to a civil penalty of not more than ten thousand dollars per day per violation. The county attorney at the request of the control officer shall file an action in superior court to recover penalties provided for in this section.

B. For purposes of determining the number of days of violation for which a civil penalty may be assessed under this section, if the control officer has notified the source of the violation and makes a prima facie showing that the conduct or events giving rise to the violation are likely to have continued or recurred past the date of notice, the days of violations shall be presumed to include the date of such notice and each day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by a preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature. Notice under this section is accomplished by the issuance of a notice of violation or order of abatement or by filing a complaint in superior court that alleges any violation described in subsection A of this section.

C. In determining the amount of a civil penalty under this section, the court shall consider all of the following:

1. The seriousness of the violation.
2. As an aggravating factor only, the economic benefit, if any, resulting from the violation.
3. Any history of that violation.
4. Any good faith efforts to comply with the applicable requirements.
5. The economic impact of the penalty on the violator.
6. The duration of the violation as established by any credible evidence including evidence other than the applicable test method.
7. Payment by the violator of penalties previously assessed for the same violation.
8. Other factors as the court deems relevant.

D. All penalties collected pursuant to this section shall be deposited in the special public health fund authorized in section 49-480.

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**Appendix B**

***ADEQ Rules to be incorporated into the SIP***

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### **R18-2-313. Existing Source Emission Monitoring**

- A. Every source subject to an existing source performance standard as specified in this Chapter shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants and other gases specified in this Section for the applicable source category.
1. Applicability.
    - a. Fossil-fuel fired steam generators, as specified in subsection (C)(1), shall be monitored for opacity, nitrogen oxides emissions, sulfur dioxide emissions, and oxygen or carbon dioxide.
    - b. Fluid bed catalytic cracking unit catalyst regenerators, as specified in subsection (C)(4), shall be monitored for opacity.
    - c. Sulfuric acid plants, as specified in subsection (C)(3) of this Section, shall be monitored for sulfur dioxide emissions.
    - d. Nitric acid plants, as specified in subsection (C)(2), shall be monitored for nitrogen oxides emissions.
  2. Emission monitoring shall not be required when the source of emissions is not operating.
  3. Variations.
    - a. Unless otherwise prohibited by the Act, the Director may approve, on a case-by-case basis, alternative monitoring requirements different from the provisions of this Section if the installation of a continuous emission monitoring system cannot be implemented by a source due to physical plant limitations or extreme economic reasons. Alternative monitoring procedures shall be specified by the Director on a case-by-case basis and shall include, as a minimum, annual manual stack tests for the pollutants identified for each type of source in this Section. Extreme economic reasons shall mean that the requirements of this Section would cause the source to be unable to continue in business.
    - b. Alternative monitoring requirements may be prescribed when installation of a continuous emission monitoring system or monitoring device specified by this Section would not provide accurate determinations of emissions (e.g., condensed, uncombined water vapor may prevent an accurate determination of opacity using commercially available continuous emission monitoring systems).
    - c. Alternative monitoring requirements may be prescribed when the affected facility is infrequently operated (e.g., some affected facilities may operate less than one month per year).
  4. Monitoring system malfunction: A temporary exemption from the monitoring and reporting requirements of this Section may be provided during any period of monitoring system malfunction, provided that the source owner or operator demonstrates that the malfunction was unavoidable and is being repaired expeditiously.
- B. Installation and performance testing required under this Section shall be completed and monitoring and recording shall commence within 18 months of the effective date of this Section.
- C. Minimum monitoring requirements:
1. Fossil-fuel fired steam generators: Each fossil-fuel fired steam generator, except as provided in the following subsections, with an annual average capacity factor of greater than 30%, as reported to the Federal Power Commission for calendar year 1976, or as otherwise demonstrated to the Department by the owner or operator, shall conform with the following monitoring requirements when such facility is subject to an emission standard for the pollutant in question.
    - a. A continuous emission monitoring system for the measurement of opacity which meets the performance specifications of this Section shall be installed, calibrated, maintained, and operated in accordance with the procedures of this Section by the owner or operator of any such steam generator of greater than 250 million Btu per hour heat input except where:
      - i. Gaseous fuel is the only fuel burned; or
      - ii. Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and where the source has never been found to be in violation through any administrative or judicial proceedings, or accepted responsibility for any violation of any visible emission standard.
    - b. A continuous emission monitoring system for the measurement of sulfur dioxide which meets the performance specifications of this Section shall be installed, calibrated, using sulfur dioxide calibration gas mixtures or other gas mixtures approved by the Director, maintained and operated on any fossil-fuel fired steam generator of greater than 250 million Btu per hour heat input which has installed sulfur dioxide pollutant control equipment.
    - c. A continuous emission monitoring system for the measurement of nitrogen oxides which meets the performance specification of this Section shall be installed, calibrated using nitric oxide calibration gas mixtures or other gas mixtures approved by the Director, maintained and operated on fossil-fuel fired steam generators of greater than 1000 million Btu per hour heat input when such facility is located in an air quality control region where the Director has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the ambient air quality standard specified in R18-2-205, unless the source owner or operator demonstrates during source compliance tests as required by the Department that such a source emits nitrogen oxides at levels 30% or more below the emission standard within this Chapter.
    - d. A continuous emission monitoring system for the measurement of the percent oxygen or carbon dioxide which meets the performance specifications of this Section shall be installed, calibrated, operated, and maintained on fossil-fuel fired steam generators where measurements of oxygen or carbon dioxide in the flue gas are required to convert either sulfur dioxide or nitrogen oxides continuous emission monitoring data, or both, to units of the emission standard within this Chapter.

2. Nitric acid plants: Each nitric acid plant of greater than 300 tons per day production capacity, the production capacity being expressed as 100% acid located in an air quality control region where the Director has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the ambient air quality standard specified in R18-2-205, shall install, calibrate using nitrogen dioxide calibration gas mixtures, maintain, and operate a continuous emission monitoring system for the measurement of nitrogen oxides which meets the performance specifications of this Section for each nitric acid producing facility within such plant.
  3. Sulfuric acid plants: Each sulfuric acid plant as defined in R18-2-101, of greater than 300 tons per day production capacity, the production being expressed as 100% acid, shall install, calibrate using sulfur dioxide calibration gas mixtures or other gas mixtures approved by the Director, maintain and operate a continuous emission monitoring system for the measurement of sulfur dioxide which meets the performance specifications of this Section for each sulfuric acid producing facility within such a plant.
  4. Fluid bed catalytic cracking unit catalyst regenerators at petroleum refineries. Each catalyst regenerator for fluid bed catalytic cracking units of greater than 20,000 barrels per day fresh-feed capacity shall install, calibrate, maintain and operate a continuous emission monitoring system for the measurement of opacity which meets the performance specifications of this Section for each regenerator within such refinery.
- D. Minimum specifications: Owners or operators of monitoring equipment installed to comply with this Section shall demonstrate compliance with the following performance specifications.
1. The performance specifications set forth in Appendix B of 40 CFR 60 are incorporated herein by reference and shall be used by the Director to determine acceptability of monitoring equipment installed pursuant to this Section. However where reference is made to the Administrator in Appendix B of 40 CFR 60, the Director may allow the use of either the state-approved reference method or the federally approved reference method as published in 40 CFR 60. The performance specifications to be used with each type of monitoring system are listed below.
    - a. Continuous emission monitoring systems for measuring opacity shall comply with performance specification 1.
    - b. Continuous emission monitoring systems for measuring nitrogen oxides shall comply with performance specification 2.
    - c. Continuous emission monitoring systems for measuring sulfur dioxide shall comply with performance specification 2.
    - d. Continuous emission monitoring systems for measuring sulfur dioxide shall comply with performance specification 3.
    - e. Continuous emission monitoring systems for measuring carbon dioxide shall comply with performance specification 3.
  2. Calibration gases: Span and zero gases shall be traceable to National Bureau of Standards reference gases whenever these reference gases are available. Every six months from date of manufacture, span and zero gases shall be reanalyzed by conducting triplicate analyses using the reference methods in Appendix A of 40 CFR 60 (Chapter 1) as amended: For sulfur dioxide, use Reference Method 6; for nitrogen oxides, use Reference method 7; and for carbon dioxide or oxygen, use Reference Method 3. The gases may be analyzed at less frequent intervals if longer shelf lives are guaranteed by the manufacturer.
  3. Cycling time: Time includes the total time required to sample, analyze, and record an emission measurement.
    - a. Continuous emission monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive six-minute period.
    - b. Continuous emission monitoring systems for measuring oxides of nitrogen, carbon dioxide, oxygen, or sulfur dioxide shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
  4. Monitor location: All continuous emission monitoring systems or monitoring devices shall be installed such that representative measurements of emissions of process parameter (i.e., oxygen, or carbon dioxide) from the affected facility are obtained. Additional guidance for location of continuous emission monitoring systems to obtain representative samples are contained in the applicable performance specifications of Appendix B of 40 CFR 60.
  5. Combined effluents: When the effluents from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere through more than one point, separate monitors shall be installed.
  6. Zero and drift: Owners or operators of all continuous emission monitoring systems installed in accordance with the requirements of this Section shall record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily, using calibration gases specified in subsection (C) as applicable, unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; shall adjust the zero span whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of Part 60, Chapter 1, Title 40 CFR are exceeded.
  7. Span: Instrument span should be approximately 200% of the expected instrument data display output corresponding to the emission standard for the source.
- E. Minimum data requirement: The following subsections set forth the minimum data reporting requirements for sources employing continuous monitoring equipment as specified in this Section. These periodic reports do not relieve the source operator from the reporting requirements of R18-2-310.01.

1. The owners or operators of facilities required to install continuous emission monitoring systems shall submit to the Director a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions, if known. The averaging period used for data reporting shall correspond to the averaging period specified in the emission standard for the pollutant source category in question. The required report shall include, as a minimum, the data stipulated in this subsection.
2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of all six-minute opacity averages greater than any applicable standards for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced, instantaneous opacity measurements per minute. Any time periods exempted shall be deleted before determining any averages in excess of opacity standards.
3. For gaseous measurements the summary shall consist of emission averages in the units of the applicable standard for each averaging period during which the applicable standard was exceeded.
4. The date and time identifying each period during which the continuous emission monitoring system was inoperative, except for zero and span checks and the nature of system repair or adjustment shall be reported. The Director may require proof of continuous emission monitoring system performance whenever system repairs or adjustments have been made.
5. When no excess emissions have occurred and the continuous emission monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
6. Owners or operators of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous emission monitoring system or as necessary to convert monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of such summaries.

F. Data reduction: Owners or operators of affected facilities shall use the following procedures for converting monitoring data to units of the standard where necessary.

1. For fossil-fuel fired steam generators the following procedures shall be used to convert gaseous emission monitoring data in parts per million to g/million cal (lb/million Btu) where necessary.

a. When the owner or operator of a fossil-fuel fired steam generator elects under subsection (C)(1)(d) to measure oxygen in the flue gases, the measurements of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry).

i. When measurements are on a wet basis, except where wet scrubbers are employed or where moisture is otherwise added to stack gases, the following conversion procedure shall be used:

$$E(Q) = C_{(ws)}F_{(w)} \left[ \frac{100}{100(1 - B_{(ws)}) - \%O_{2(ws)}} \right]$$

ii. When measurements are on a wet basis and the water vapor content of the stack gas is determined at least once every 15 minutes the following conversion procedure shall be used:

$$E(Q) = C_{(ws)}F \left[ \frac{100}{100(1 - B_{(ws)}) - \%O_{2(ws)}} \right]$$

Use of this equation is contingent upon demonstrating the ability to accurately determine B(ws) such that any absolute error in B(ws) will not cause an error of more than ±1.5% in the term:

$$\left[ \frac{100}{100(1 - B_{(ws)}) - \%O_{2(ws)}} \right]$$

iii. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E(Q) = CF \left[ \frac{100}{100 - \%O_{2(ws)}} \right]$$

b. When the owner or operator elects under subsection (C)(1)(d) to measure carbon dioxide in the flue gases, the measurement of the pollutant concentration and the carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure used:

$$E(Q) = CF(c) \left[ \frac{100}{\%CO_2} \right]$$

c. The values used in the equations under subsection (F)(1) above are derived as follows:

$E(Q)$  = pollutant emission, g/million cal (lb/million Btu).

$C$  = pollutant concentration, g/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each hourly period by  $4.16 \times 10^{-5}$  M g/dscm per ppm ( $2.64 \times 10^{-9}$  M lb/dscf per ppm) where  $M$  = pollutant molecular weight, g/g-mole (lb/lb-mole),  $M = 64$  for sulfur dioxide and 46 for oxides of nitrogen.

$C(ws)$  = pollutant concentrations at stack conditions, g/wscm (lb/wscf), determined by multiplying the average concentration (ppm) for each one-hour period by  $4.15 \times 10^{-5}$  M lb/wscm per ppm ( $2.59 \times 10^{-5}$  M lb/wscf per ppm) where  $M$  = pollutant molecular weight, g/g mole (lb/lb mole).  $M = 64$  for sulfur dioxide and 46 for nitrogen oxides.

$\%O(2), \%CO(2)$  = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under subsection (D)(1)(d).

$F, F(c)$  = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted ( $F$ ), a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted ( $F(c)$ ), respectively. Values of  $F$  and  $F(c)$  are given in 40 CFR 60.45(f) (Chapter 1).

$F(w)$  = A factor representing a ratio of the volume of wet flue gases generated to the caloric value of the fuel combusted. Values of  $F(w)$  are given in Reference Method 19 of the Arizona Testing Manual.

$B(wa)$  = Proportion by volume of water vapor in the ambient air. Approval may be given for determination of  $B(wa)$  by on-site instrumental measurement provided that the absolute accuracy of the measurement technique can be demonstrated to be within  $\pm 0.7\%$  water vapor. Estimation methods for  $B(wa)$  are given in Reference Method 19 of the Arizona Testing Manual.

$B(ws)$  = Proportion by volume of water vapor in the stack gas.

2. For sulfuric acid plants as defined in R18-2-101, the owner or operator shall:
  - a. Establish a conversion factor three times daily according to the procedures of 40 CFR 60.84(b) (Chapter 1),
  - b. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in Kg/metric ton (lb/short ton), and
  - c. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.
3. For nitric acid plants, the owner or operator shall:
  - a. Establish a conversion factor according to the procedures of 40 CFR 60.73(b) (Chapter 1),
  - b. Multiply the conversion factor by the average nitrogen oxides concentration in the flue gases to obtain the nitrogen oxides emissions in the units of the applicable standard,
  - c. Report the average nitrogen oxides emission for each averaging period in excess of applicable emission standard in the quarterly summary.
4. The Director may allow data reporting or reduction procedures varying from those set forth in this Section if the owner or operator of a source shows to the satisfaction of the Director that his procedures are at least as accurate as those in this Section. Such procedures may include but are not limited to the following:
  - a. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).
  - b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

#### Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (C), paragraph (1), subparagraph (d) (Supp. 80-2). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-313 renumbered without change as R18-2-313 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).

#### R18-2-327. Annual Emissions Inventory Questionnaire

- A. Every source subject to a permit requirement under this Chapter shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or 90 days after the Director makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.
- B. The questionnaire shall be on a form provided by the Director and shall include the following information:
  1. The source's name, description, mailing address, contact person and contact person phone number, and physical address and location, if different than the mailing address.
  2. Process information for the source, including design capacity, operations schedule, and emissions control devices, their description and efficiencies.
  3. The actual quantity of emissions from permitted emission points and fugitive emissions as provided in the permit, including documentation of the method of measurement, calculation, or estimation, determined pursuant to subsection (C), of the following regulated air pollutants:
    - a. Any single regulated air pollutant in a quantity greater than 1 ton or the amount listed for the pollutant in subsection (a) of the definition of "significant" in R18-2-101, whichever is less.

- b. Any combination of regulated air pollutants in a quantity greater than 2 1/2 tons.
- C. Actual quantities of emissions shall be determined using the following emission factors or data:
1. Whenever available, emissions estimates shall either be calculated from continuous emissions monitors certified pursuant to 40 CFR 75, Subpart C and referenced appendices, or data quality assured pursuant to Appendix F of 40 CFR 60.
  2. When sufficient data pursuant to subsection (C)(1) is not available, emissions estimates shall be calculated from data from source performance tests conducted pursuant to R18-2-312 in the calendar year being reported or, when not available, conducted in the most recent calendar year representing the operating conditions of the year being reported.
  3. When sufficient data pursuant to subsection (C)(1) or (C)(2) is not available, emissions estimates shall be calculated using emissions factors from EPA Publication No. AP-42 "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources, Fifth Edition, 1995, U.S. Environmental Protection Agency, Research Triangle Park, NC (and no future editions) which is incorporated by reference and is on file with the Department of Environmental Quality and the Office of Secretary of State. AP-42 can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, telephone (202) 783-3238, or by downloading the document from the EPA Technology Transfer Network, computer modem number (919) 541-5742, setting 8-N-1, VT100, or ANSI.
  4. When sufficient data pursuant to subsections (C)(1) through (C)(3) is not available, emissions estimates shall be calculated from material balance using engineering knowledge of process.
  5. When sufficient data pursuant to subsections (C)(1) through (C)(4) is not available, emissions estimates shall be calculated by equivalent methods approved by the Director. The Director shall only approve methods that are demonstrated as accurate and reliable as the applicable method in subsections (C)(1) through (4).
- D. Actual quantities of emissions calculated under subsection (C) shall be determined on the basis of actual operating hours, production rates, in-place process control equipment, operational process control data, and types of materials processed, stored, or combusted.
- E. An amendment to an annual emission inventory questionnaire, containing the documentation required by subsection (B)(3), shall be submitted to the Director by any source whenever it discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous questionnaire. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment under this subsection shall not subject the owner or operator to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was due to reasonable cause and not wilful neglect.
- F. The Director may require submittal of supplemental emissions inventory questionnaires for air contaminants pursuant to A.R.S. §§ 49-422, 49-424, and 49-426.03 through 49-426.08.

#### **Historical Note**

Emergency rule adopted effective September 17, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-3).  
Emergency rule re-adopted without change effective December 16, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-4). Emergency expired; text deleted (Supp. 93-1). New Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective December 7, 1995 (Supp. 95-4).

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**AIR QUALITY MONITORING PROCEDURES MANUAL**

**Arizona Department of Health Services  
Division of Environmental Health Services  
Bureau of Air Quality Control**

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## AIR QUALITY MONITORING PROCEDURES

### 1. QUALITY ASSURANCE

This section contains the minimum quality assurance requirements for air monitoring networks. These requirements are regarded as the minimum necessary for the control and assessment of the quality of ambient air monitoring data submitted to the State of Arizona. Operators of monitoring stations are encouraged to develop and implement quality assurance programs more extensive than the minimum required or to continue such programs where they already exist.

Quality assurance consists of two distinct and equally important functions. One function is the assessment of the quality of the monitoring data by estimating their precision and accuracy. The other function is the control, and improvement, of the quality of the monitoring data by implementation of quality control policies, procedures, and corrective actions. These two functions form a control loop: when the assessment function indicates that the data quality is inadequate, the control effort must be increased until the data quality is acceptable.

In order to provide uniformity in the assessment and reporting of data quality among all networks, the assessment procedures are specified explicitly in subsections 1.3 through 1.7 of these procedures.

In contrast, the control and corrective action function encompasses a variety of policies, procedures, specifications, standards, and corrective measures which have varying effects on the resulting data

quality. The selection and degree of specific control measures and corrective actions used depend on a number of factors such as the monitoring methods and equipment used, field and laboratory conditions, the objectives of the monitoring, the level of data quality needed, the expertise of assigned personnel, the cost of control procedures, pollutant concentration levels, etc. Accordingly, quality control requirements are specified in general terms below, to allow each operator to develop a quality control system which is most effective for its own circumstances.

### 1.1 Quality Control Program

Each operator must develop and implement a quality control program consisting of policies, procedures, specifications, standards, and documentation necessary to:

- (1) Provide data of adequate quality to meet monitoring objectives
- (2) Minimize loss of air quality data due to malfunctions or out-of-control conditions.

The quality control program must be described in detail, suitably documented, and approved by the Director.

Primary guidance for developing the quality control programs is contained in references 1 and 2, which also contain many suggested procedures, checks, and control specifications. Many specific quality control checks and specifications for manual methods are included in the respective reference methods described in 40 CFR 50 or in the respective equivalent method descriptions available from the U. S. Environmental Protection Agency (see reference 5). Similarly, quality control procedures related to specifically designated reference and equivalent analyzers are contained in their respective operation and

instruction manuals. This guidance, and any other pertinent information from appropriate sources, should be used by operators in developing their quality control programs.

As a minimum, each quality control program must have operational procedures for each of the following activities:

- (1) Selection of methods, analyzers, or samplers
- (2) Installation of equipment
- (3) Calibration
- (4) Zero/span checks and adjustments of automated analyzers
- (5) Control checks and their frequency
- (6) Control limits for zero, span and other control checks, and respective corrective actions when such limits are surpassed.
- (7) Use of multiple ranges with automated analyzers
- (8) Preventive and remedial maintenance
- (9) Air pollution episode monitoring
- (10) Recording and validating data
- (11) Documentation of quality control information

### 1.2 Pollutant Standards

Gaseous standards (permeation tubes, permeation devices or cylinders of compressed gas) used to obtain test concentrations for CO, SO<sub>2</sub>, and NO<sub>2</sub> must be working standards certified by comparison to a National Bureau of Standards (NBS) gaseous Standard Reference Material (SRM). A traceability protocol for certifying a working standard by direct comparison to an NBS SRM is given in reference 3. Direct use of an NBS SRM as a working standard is not prohibited but is discouraged because of their limited supply and expense.

Test concentrations for ozone must be obtained in accordance with the UV photometric calibration procedure specified in Appendix D of 40 CFR Part 50, or by means of an ozone transfer standard which has been certified. Consult reference 4 for guidance on ozone transfer standards. Flow measurements must be made by a flow measuring instrument which is traceable to an authoritative volume or other standard.

### 1.3 Data Quality Assessment

#### 1.3.1 Automated Methods

##### 1.3.1.1 Precision

A one-point precision check must be carried out at least once every two weeks on each automated analyzer used to measure  $\text{SO}_2$ ,  $\text{NO}_2$ ,  $\text{O}_3$  and CO. The precision check is made by challenging the analyzer with a precision check gas of known concentration between 25 and 75 percent of full scale. The standards from which precision checks test concentrations are obtained must be traceable to NBS SRM's as specified in subsection 1.2. Except for certain CO analyzers described below, analyzers must operate in their normal sampling mode during the precision check, and the test atmosphere must pass through all filters, scrubbers, conditioners and other components used during normal ambient sampling and as much of the ambient air inlet system as is practicable. If permitted by the associated operation or instruction manual, a CO analyzer may be temporarily modified during the precision check to reduce vent or purge flows, or the test atmosphere may enter the analyzer at a point other than the normal sample inlet, provided that the analyzer's response is not likely to be altered by these

deviations from the normal operational mode. If a precision check is made in conjunction with a zero/span adjustment, it must be made prior to such zero and span adjustments.

The difference between the actual concentration of the precision check gas and the concentration indicated by the analyzer is used to assess the precision of the monitoring data as described in 1.4.1.1.

### 1.3.1.2 Accuracy

Each calendar quarter audit at least 25 percent of all analyzers that monitor for SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub> or CO such that each analyzer is audited at least once per year. If there are fewer than four analyzers for a pollutant within a network, randomly reaudit one or more analyzers so that at least one analyzer for that pollutant is audited each calendar quarter.

The audit is made by challenging the analyzer with at least one audit gas of known concentration from each of the following ranges which fall within the measurement range of the analyzer being audited:

<u>Audit Point</u>	<u>Concentration Range % of Full-Scale</u>
1	3 to 8
2	15 to 20
3	40 to 45
4	80 to 90

The standards from which audit gas test concentrations are obtained must be traceable to NBS SRM's as specified in subsection 1.2. Except for NBS gaseous SRM's, standards and equipment used must be different from the standards and equipment used for calibration and spanning. The

auditor should not be the operator/analyst who conducts the routine monitoring, calibration, and analysis.

The audit shall be carried out by allowing the analyzer to analyze an audit test atmosphere in the same manner as described for precision checks. The exception given in 1.3.1.1 for certain CO analyzers does not apply for audits.

The difference between the actual concentration of the audit test gas and the concentration indicated by the analyzer is used to assess the accuracy of the monitoring data as described in section 1.4.1.2.

### 1.3.2 Manual Methods

#### 1.3.2.1 Precision

For networks with one to nine sites, select at least one TSP, NO<sub>2</sub>, and SO<sub>2</sub> monitoring site for duplicate sampling and collocate two samplers at the selected site. For networks with ten or more sites, select at least two sites for duplicate sampling. Although only one or two pairs of collocated samplers are required to estimate the precision of a reporting organization, additional collocated sampling is encouraged. Sites with the highest expected annual mean concentration must be selected, or if such sites are impractical, alternate sites approved by the Director may be selected. The collocated samplers must be within four meters of each other, but high volume samplers must be at least two meters apart to preclude airflow interference. Calibration, sampling and analysis must be the same for both collocated samplers as well as for all samplers in the network. The collocated samplers must be operated whenever routine sampling is scheduled. For each pair of collocated samplers, designate one as the sampler which will be used to report air quality for

the site and designate the other as the duplicate sampler. The differences in measured concentration ( $\mu\text{g}/\text{m}^3$ ) between the two collocated samplers are used to calculate precision as described in 1.4.2.1.

For Pb, precision will be estimated from duplicate filter strip analyses performed on samples from the expected highest concentration lead site. The precision of an equivalent method may be assessed by analyzing identical aliquots of the samples collected at the highest concentration lead site.

For each day lead samples are collected, cut two identical strips from the filter or take two identical aliquots. Designate the first strip/aliquot as the sample which will be used to report air quality for the site and designate the other as the duplicate sample. The difference in measured concentration ( $\mu\text{g}/\text{m}^3$ ) between the two samples is used to calculate precision as described in 1.4.2.

#### 1.3.2.2 Accuracy

The accuracy of manual sampling methods is assessed by auditing a portion of the measurement process. For TSP, flow rate measurement is audited. For the Pb,  $\text{SO}_2$ , and  $\text{NO}_2$  methods, analytical measurement is audited.

For the TSP method, audit the flow rate of at least 25 percent of the high volume samplers such that each sampler is audited at least once per year. If there are fewer than four high volume samplers within a reporting organization, randomly reaudit one or more samplers so that one sampler is audited each calendar quarter.

Audit the flow rate at one flow rate, between 40 and 60 cfm, using a reference flow device described in section 2.2.8, pages 3-5, of reference 2, or a similar transfer flow standard. The audit device must be calibrated against a flow standard different from the one used to calibrate the flow of the high volume sampler being audited. With the audit device and a normal glass fiber filter in place, operate the high volume sampler at its normal flow rate. The difference in flow rate (in  $\text{m}^3/\text{min}$ ) between the audit flow measurement and the flow indicated by the sampler's normal flow indicator are used to calculate accuracy as described in 1.4.2.2.

Great care must be used in auditing high volume samplers having flow regulators because the introduction of resistance plates in the audit device can cause abnormal flow patterns at the point of flow sensing. For this reason, the orifice of the flow audit device should be used without resistance plates in auditing flow regulated high volume samplers, or other steps should be taken to assure that flow patterns are not perturbed at the point of flow sensing.

For the  $\text{SO}_2$  method, prepare audit solutions from a working sulfite-TCM solution as described in section 6.2.9 of the  $\text{SO}_2$  Reference Method (40 CFR 50, Appendix A). These audit samples must be prepared independently from the standardized sulfite solutions used in the routine analysis procedure. New sulfite-TCM audit samples must be prepared every 30 days and must be stored between 0 and  $5^\circ\text{C}$ .

Prepare audit samples in each of the concentration ranges of 0.2-0.3, 0.5-0.6, and 0.8-0.9  $\mu\text{g SO}_2/\text{ml}$ . Analyze an audit sample in each of the

three ranges at least once each day that samples are analyzed and at least twice per calendar quarter. The differences between the audit concentrations and the indicated concentrations (in ug/SO<sub>2</sub> ml) are used to calculate accuracy as described in section 1.4.2.2.

For the NO<sub>2</sub> method, prepare audit solutions from a working sodium nitrite solution as described in the appropriate equivalent method (see reference 5). These audit samples must be prepared independently from the standardized nitrite solution used in the routine analysis procedure. New aqueous sodium nitrite audit samples must be prepared every three months. Prepare audit samples in each of the concentration ranges of 0.2-0.3, 0.5-0.6, and 0.8-0.9 ug NO<sub>2</sub>/ml. Analyze an audit sample in each of the three ranges at least once each day that samples are analyzed and at least twice per calendar quarter. The differences between the audit concentrations (in ug NO<sub>2</sub>/ml) and the indicated concentrations (in ug NO<sub>2</sub>/ml) are used to calculate accuracy as described in 1.4.2.2.

For the Pb method, for each calendar quarter, audit the Pb analysis using glass fiber filter strips containing a known quantity of lead. Audit samples are prepared by depositing a Pb solution on 1.9 cm by 20.3 cm (3/4 inch by 8 inch) unexposed glass fiber filter strips and allowing to dry thoroughly. The audit samples must be prepared by using reagents different from those used to calibrate the Pb analytical equipment being audited. Prepare audit samples in the following concentration ranges:

<u>Pb Concentration ug/strip</u>	<u>Equivalent Ambient Pb Concentration, ug/m<sup>3</sup></u>
100- 300	.5-1.5
600-1000	3.0-5.0

The above equivalent ambient Pb concentrations are based on sampling at 1.7 m<sup>3</sup>/min. for 24 hours on 20.3 x 25.4 cm (8 inch x 10 inch) glass fiber filters.

Audit samples must be extracted using the same extraction procedures used for exposed filters. Analyze three audit samples in each of the two ranges each quarter that samples are analyzed. The audit sample analyses are to be spread out as much as possible over the entire calendar quarter. The percent difference between the audit concentration and the analyst's measured concentrations (in ug Pb/strip) is used to calculate accuracy as described in 1.4.2.2.

#### 1.4 Calculations for Data Quality Assessment

##### 1.4.1 Automated Methods

##### 1.4.1.1 Precision

Estimates of the precision are calculated from the results of biweekly precision checks as specified in section 1.3.1.1. At the end of each calendar quarter calculate a combined precision probability interval for all analyzers in the network for each pollutant. Directions for calculations are given below and directions for reporting are given in section 1.5. If monitoring data are invalidated during the entire period represented by a given precision check, the results of that precision check shall be excluded from the calculations.

For single analyzer precision, calculate the percentage difference ( $d_i$ ) for each precision check using equation 1.

$$d_i = \frac{Y_i - X_i}{X_i} \times 100 \quad (1)$$

where:  $Y_i$  = analyzer's indicated concentration from the  $i$ -th precision check.

$X_i$  = known concentration of test gas used for the  $i$ -th precision check.

For each analyzer calculate the quarterly average ( $d_j$ ), equation 2, and the standard deviation ( $S_j$ ), equation 3.

$$\bar{d}_j = \frac{1}{n} \sum_{i=1}^n d_i \quad (2)$$

$$S_j = \sqrt{\frac{1}{n-1} \sum_{i=1}^n \left[ d_i^2 - \frac{1}{n} \left( \sum_{i=1}^n d_i \right)^2 \right]} \quad (3)$$

In the equations,  $n$  is the number of precision checks on the instrument made during the calendar quarter. For example,  $n$  should be 6 or 7 if precision checks are made biweekly during a quarter.

To compute network precision for each pollutant, calculate the average of averages ( $\bar{D}$ ) and pooled standard deviation ( $S_a$ ) for all analyzers monitoring the pollutant using either equations 4 and 5 or 4a and 5a.

$$\bar{D} = \frac{1}{k} \sum_{j=1}^k \bar{d}_j \quad (4)$$

$$S_a = \frac{1}{k} \sum_{j=1}^k S_j^2 \quad (5)$$

In these equations,  $k$  is the number of analyzers within the reporting organization for a single pollutant. Use equations 4 and 5 when the same number of precision checks are made for each instrument. Otherwise, use equations 4a and 5a to obtain a weighted average and a weighted standard deviation.

$$\bar{D} = \frac{n_1 \bar{d}_1 + n_2 \bar{d}_2 + \dots + n_j \bar{d}_j + n_k \bar{d}_k}{n_1 + n_2 + \dots + n_j + \dots + n_k} \quad (4a)$$

$$S_a = \sqrt{\frac{(n_1 - 1) S_1^2 + (n_2 - 1) S_2^2 + \dots + (n_j - 1) S_j^2 + \dots + (n_k - 1) S_k^2}{n_1 + n_2 + \dots + n_j + \dots + n_k - k}} \quad (5a)$$

For each pollutant, calculate the 95 percent probability limits for the precision of a reporting network using equations 6 and 7 and record these limits on the front of Form 1 under columns 11-18. (See section 1.5 for explanation of Form 1).

$$\text{Upper 95 Percent Probability Limit} = \bar{D} + 1.96 S_a \quad (6)$$

$$\text{Lower 95 Percent Probability Limit} = \bar{D} - 1.96 S_a \quad (7)$$

#### 1.4.1.2 Accuracy

Estimates of the accuracy are calculated from the results of independent audits as described in section 1.3.1.2. At the end of each calendar quarter, calculate a combined accuracy probability interval for all analyzers in the network for each pollutant. Separate probability limits are calculated for each audit concentration level listed in 1.3.1.2. Directions for calculations are given below (directions for reporting are given in section 1.5).

For single analyzer accuracy, calculate the percentage difference ( $d_i$ ) for each audit concentration using equation 1 where  $Y_i$  is the analyzer's indicated concentration from the  $i$ -th audit check and  $X_i$  is the known concentration of the audit gas used for the  $i$ -th audit check.

For network accuracy, using equation 8, calculate, for each audit concentration level, the average ( $D$ ) of the individual percentage differences ( $d_i$ ) for all  $k$  analyzers measuring a given pollutant audited during the quarter.

$$D = \frac{1}{k} \sum_{i=1}^k \bar{d}_i \quad (8)$$

For each concentration level, calculate the standard deviation ( $S_a$ ) of all the individual percentage differences for all analyzers audited during the quarter, using equation 9. Repeat for each pollutant.

$$S_a = \sqrt{\frac{1}{k-1} \left[ \sum_{i=1}^k d_i^2 - \frac{1}{k} \left( \sum_{i=1}^k d_i \right)^2 \right]} \quad (9)$$

For networks having four or fewer analyzers for a particular pollutant, only one audit is required each quarter. Therefore, the average and the standard deviation cannot be calculated. For such reporting units, the audit results of two consecutive quarters are required to calculate an average and a standard deviation using equations 8 and 9, and the reporting or probability limits are therefore required on a semi-annual (instead of a quarterly) basis. For each pollutant, calculate the 95 percent probability limits for the accuracy of a reporting network at each audit concentration level using equations 6 and 7 and record these limits on Form 2. (See section 1.5 for explanation of Form 2).

#### 1.4.2 Manual Methods

##### 1.4.2.1 Precision

Estimates of precision are calculated from the results obtained from collocation of TSP, NO<sub>2</sub>, and SO<sub>2</sub> samplers or by duplicate Pb analyses as described in section 1.3.2.1. At the end of each calendar quarter, calculate a combined precision probability interval for each

pollutant. Directions for calculation are given below and directions for reporting are given in section 1.5.

To compute single site precision, calculate the percentage difference ( $d_i$ ) for each of the paired measurements obtained in accordance with 1.3.2.1, using equation 1 where  $Y_i$  is the concentration of pollutant measured by the duplicate sampler and  $X_i$  is the concentration of pollutant measured by the sampler reporting air quality for the site. For each site, calculate the quarterly average percentage difference ( $d_j$ ), using equation 2, and the standard deviation ( $S_j$ ), using equation 3.

At low concentrations, agreement between the measurements of collocated samplers, expressed as 95 percent probability limits, may be poor. For this reason a separate count is made of the occurrence of pollutant measurements below specified levels. Count the number of samples which indicate a measurement from a sampler reporting air quality for the site below the following limits:

TSP - less than  $20 \text{ ug/m}^3$

$\text{SO}_2$  - less than  $40 \text{ ug/m}^3$

$\text{NO}_2$  - less than  $30 \text{ ug/m}^3$

Pb - less than  $.15 \text{ ug/m}^3$

Report the counts on Form 2.

To compute network precision for each pollutant, calculate the average percentage difference ( $\bar{D}$ ) and pooled standard deviation ( $S_a$ ) using equations 4 and 5, or using equations 4a and 5a if different numbers

of paired measurements are made at the collocated sites. Results from all collocated sampling sites shall be reported.

Calculate the 95 percent probability limits for the precision of a reporting unit, using equations 10 and 11, and record them on Form 1. (See section 1.5 for explanation of Form 2).

$$\text{Upper 95 Percent Probability Limit} = \bar{D} + 1.96 S_a / \sqrt{2} \quad (10)$$

$$\text{Lower 95 Percent Probability Limit} = \bar{D} - 1.96 S_a / \sqrt{2} \quad (11)$$

#### 1.4.2.2 Accuracy

To compute TSP single sampler accuracy, calculate the percentage difference ( $d_i$ ) for each audit performed in accordance with 1.3.2.2, using equation 1. Let  $X_i$  represent the known flow rate and  $Y_i$  represent the indicated flow rate in equation 1.

To compute TSP network accuracy, calculate the average ( $\bar{D}$ ) of the individual percent differences for all high volume samplers audited during the calendar quarter, using equation 8. Compute the standard deviation ( $S_a$ ) of all the percentage differences for all the samplers audited during the calendar quarter, using equation 9.

Calculate the 95 percent probability limits for the accuracy of a reporting network using equations 6 and 7, and record these limits on Form 2 under the middle level column. Note that since the audit is conducted at only one level, the low level and high levels columns are not used. For reporting networks having four or fewer high volume samplers for TSP, only one audit is required each quarter. For such

reporting networks, the audit results of two consecutive quarters are required to calculate an average and a standard deviation using equations 8 and 9. Therefore, semi-annual reporting (instead of quarterly) of probability limits is required.

To compute single-analysis-day accuracy for  $SO_2$ ,  $NO_2$ , and Pb, calculate the percentage difference ( $d_i$ ) for each audit at each concentration level using equation 1. Let  $X_i$  represent the known value of the audit sample and  $Y_i$  the indicated value of  $SO_2$ ,  $NO_2$ , or Pb in equation 1. Audits of the analysis for  $SO_2$ ,  $NO_2$ , and Pb are performed in accordance with 1.3.2.2.

To compute network accuracy for  $SO_2$ ,  $NO_2$ , and Pb, calculate the average ( $\bar{D}$ ) of the percent differences at each concentration level for all analysis days during the quarter using equation 8. Compute the standard deviation ( $S_a$ ) of the individual percentage differences using equation 9. Calculate the 95 percent probability limits for the accuracy of the network using equations 6 and 7 and record these limits on Form 2 for each concentration level.

## 1.5 Reporting Requirements

### 1.5.1 Quarterly Reports

For each network fill out Form 1 and Form 2 according to the directions given below, and submit the forms within 90 days of the end of the quarter to the Department.

### 1.5.2 Annual Reports

Compute the annual mean and standard deviation of the percent differences for all precision checks and audits performed during the year. Using these values, calculate the annual probability limits for precision and for

accuracy at each audit level. Record these data on Forms 1 and 2 and submit the forms to the Department within 90 days after the end of the year.

1.5.3 Instructions for Form 1 - Automated Analyzers

Line

Entry

Name of Reporting Organization: Name of company

Network: Geographical location, referring to city or town.

Block No.

- 1-2 Year: Last two digits of the calendar year.
- 3 Quarter: Enter 1, 2, 3 or 4 to refer to calendar quarter the monitoring data and quality assessment represent. Enter 0 to indicate annual report.
- 4-6 Number of Analyzers: Count the number of analyzers in the network that report monitoring data for each pollutant.
- 7-10 Number of Precision Checks: Count the total number of precision checks included in the calculations reported.
- 11-14 Lower Probability Limit, Precision: Block 11 is either "+" or "-". Blocks 12-14 contain the percentage (round off to a whole number) obtained from equation 11.
- 15-18 Upper Probability Limit, Precision: Block 15 is either "+" or "-". Blocks 16-18 contain the percentage obtained from equation 10. Note: If precision limits exceed three digits, report as 999.
- 19 Source of Audit Gas: For accuracy determination, refer to code table, note 1, on the form.
- 20-21 Number of Audits: Report the total number of multipoint audits performed on the analyzers reported in blocks 20-21.
- 22-53 Probability Limits, Accuracy: The lower and upper probability limits for each pollutant concentration level of the accuracy audits are entered in blocks 22-53.

22-25 Lower Probability Limits, Accuracy: Blocks 22, 30, 38, and 46  
30-33 are either "+" or "-". Blocks 23-25, 31-33, 39-41, and 47-49  
38-41 contain the percentages obtained from equation 7.

46-49

26-29 Upper Probability Limit, Accuracy: Blocks 26, 34, 42, and 50  
34-37 are either "+" or "-". Blocks 27-29, 35-37, 43-45, and 51-53  
42-45 contain the percentages obtained from equation 6. Note: If  
50-53 only one audit is performed during a given quarter for a given  
pollutant, it is not possible to calculate probability limits  
for that quarter. In that case, blocks 22-53 are left blank  
for the first such quarter and the number 01 is reported in  
blocks 20-21. Probability limits are then computed and  
reported on a semi-annual basis (i.e., after the next quarter)  
from the audit data obtained during the two consecutive quarters.

#### 1.5.4 Instructions for Form 2 - Manual Methods

Line

Entry

Name of Reporting Organization: Name of Company

Network: Geographical location, referring to city or town.

Block No.

1-2 Year: Last two digits of the calendar year.

3 Quarter: Enter 1, 2, 3 or 4 to refer to calendar quarter for  
which the monitoring data and quality assessments were obtained.  
Enter 0 to indicate annual report.

4-5 Number of Samplers: Count the number of samplers for each  
pollutant for which monitoring data are reported.

6-7 Number of Collocated Sites: Number of sites having collocated  
samplers.

- 8-10 Number of Collocated Samples Below the Limit: Count the number of samples from the collocated sites where the measurements from the sampler reporting air quality for the site are below the indicated limits.
- 11-14 Lower Probability Limit, Precision: Block 11 is either "+" or "-". Blocks 12-14 contain the percentage obtained from equation 11. Round off to a whole number.
- 15-18 Upper Probability Limit, Precision: Block 15 is either "+" or "-". Blocks 16-18 contain the percentage obtained from equation 10. Note: If precision limits exceed three digits, report as 999.
- 19 Type Sampler: Enter A, B, or C, depending on type of flow control.
- 20-21 Number Audits: Number of audits performed.
- 22-25 Lower Probability Limits, Accuracy: Blocks 22, 30, and 38 are either "+" or "-". Blocks 23-25, 31-33, and 39-41 contain the percentages obtained from equation 7.
- 26-29 Upper Probability Limit, Accuracy: Blocks 26, 34, and 42 are either "+" or "-". Blocks 27-29, 35-37, and 43-45 contain the percentages obtained from equation 6. Note: If accuracy limits exceed three digits, report as 999. Report, as required, all pollutants (TSP, SO<sub>2</sub>, NO<sub>2</sub>, Pb) as determined by manual sampling methods. Note that only blocks 30-37 are used for TSP. Note: If only one audit is performed during a given quarter for a given pollutant, it is not possible to calculate probability limits for that quarter. In that case, blocks 22-45 are left blank for the first such quarter and the number

01 is reported in blocks 20-21. Probability limits are then computed and reported on a semi-annual basis (i.e., after the next quarter) from the audit data obtained during the two consecutive quarters.

YEAR      
 QUARTER

FORM 1

ARIZONA DEPARTMENT OF HEALTH SERVICES • DIVISION OF ENVIRONMENTAL HEALTH SERVICES  
**AIR QUALITY DATA ASSESSMENT REPORT**

NAME OF REPORTING ORGANIZATION \_\_\_\_\_ NETWORK \_\_\_\_\_

POLLUTANT NUMBER ANALYZERS NUMBER PRECISION CHECKS

**PRECISION—  
 AUTOMATED ANALYZERS**

POLLUTANT	NUMBER ANALYZERS	NUMBER PRECISION CHECKS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
CO	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 4.6	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 7.10	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18
NO <sub>2</sub>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 4.6	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 7.10	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18
O <sub>3</sub>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 4.6	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 7.10	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18
SO <sub>2</sub>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 4.6	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 7.10	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 11-18

**ACCURACY—AUTOMATED ANALYZERS**

POLLUTANT	GAS	AUDIT SOURCE	NUMBER AUDITS	PROBABILITY LIMITS			
				LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
CO	15		20-21	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 21-29	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 30-37	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 38-46	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 46-53
NO <sub>2</sub>	19		20-21	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 21-29	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 30-37	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 38-46	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 46-53
O <sub>3</sub>	19		20-21	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 21-29	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 30-37	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 38-46	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 46-53
SO <sub>2</sub>	19		20-21	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 21-29	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 30-37	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 38-46	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 46-53

'A - NBS Supplied SRM  
 B - EMSL Reference Gas  
 C - Other (Identify Vendor) CO  
 D - Other (Identify Vendor) NO<sub>2</sub>  
 E - Other (Identify Vendor) O<sub>3</sub>  
 F - Other (Identify Vendor) SO<sub>2</sub>

ARIZONA DEPARTMENT OF HEALTH SERVICES • DIVISION OF ENVIRONMENTAL HEALTH SERVICES  
**AIR QUALITY DATA ASSESSMENT REPORT**

FORM 2

YEAR   QUARTER

NAME OF REPORTING ORGANIZATION \_\_\_\_\_

NETWORK \_\_\_\_\_

**PRECISION—  
 MANUAL METHODS**

POLLUTANT	NUMBER SAMPLERS	NUMBER COLOCATED SITES	NUMBER COLOCATED SAMPLES	SAMPLES LIMIT	LIMIT (ug/m <sup>3</sup> )	PROBABILITY LIMITS																
TSP	<input type="text"/> 4.5	<input type="text"/> 6.7	<input type="text"/> 8.10	<input type="text"/> 8.10	20	<table border="1"> <tr> <td>Lower</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>Upper</td> </tr> <tr> <td></td> <td><input type="text"/></td> </tr> </table>	Lower	<input type="text"/>	Upper		<input type="text"/>											
Lower	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Upper															
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															
SO <sub>2</sub>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> 8.10	40	<table border="1"> <tr> <td>Lower</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>Upper</td> </tr> <tr> <td></td> <td><input type="text"/></td> </tr> </table>	Lower	<input type="text"/>	Upper		<input type="text"/>											
Lower	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Upper															
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															
NO <sub>2</sub>	<input type="text"/> 4.5	<input type="text"/> 6.7	<input type="text"/> 8.10	<input type="text"/> 8.10	30	<table border="1"> <tr> <td>Lower</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>Upper</td> </tr> <tr> <td></td> <td><input type="text"/></td> </tr> </table>	Lower	<input type="text"/>	Upper		<input type="text"/>											
Lower	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Upper															
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															
Pb	<input type="text"/> 4.5	<input type="text"/> 6.7	<input type="text"/> 8.10	<input type="text"/> 8.10	.15	<table border="1"> <tr> <td>Lower</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>Upper</td> </tr> <tr> <td></td> <td><input type="text"/></td> </tr> </table>	Lower	<input type="text"/>	Upper		<input type="text"/>											
Lower	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Upper															
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															

**ACCURACY—MANUAL METHODS**

POLLUTANT	TYPE SAMPLER	NUMBER AUDITS	LEVEL 1			LEVEL 2			LEVEL 3											
			Lower	Upper	Probability	Lower	Upper	Probability	Lower	Upper	Probability									
TSP	<input type="text"/> 19	<input type="text"/> 20-21	<input type="text"/>																	
SO <sub>2</sub>	<input type="text"/> 19	<input type="text"/> 20-21	<input type="text"/>																	
NO <sub>2</sub>	<input type="text"/> 19	<input type="text"/> 20-21	<input type="text"/>																	
Pb	<input type="text"/> 19	<input type="text"/> 20-21	<input type="text"/>																	

\*A - With Automatic Flow Control

B - Without Automatic Flow Control

C - With Critical Orifice Flow Control

## References

1. "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume I - Principles." EPA-600/9-76-500. March 1976, available from U. S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory (MD-77), Research Triangle Park, NC 27711.
2. "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II - Ambient Air Specific Methods." EPA-600/4-77-027a, May, 1977. Available from U. S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory (MD-77), Research Triangle Park, NC 27711
3. "Traceability Protocol for Establishing True Concentrations of Gases Used for Calibration and Audits of Air Pollution Analyzers," (Protocol No. 2), June, 1978. Available from U. S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Quality Assurance Branch, (MD-77), Research Triangle Park, NC 27711.
4. "Transfer Standards for Calibration of Ambient Air Monitoring Analyzers for Ozone," June, 1978. Available from U. S. Environmental Protection Agency, Department E (MD-77), Research Triangle Park, NC 27711.
5. List of Reference and Equivalent Methods." Available from U. S. Environmental Protection Agency, Department E (MD-77), Research Triangle Park, NC 27711.

**1.6 Data Quality Assessment Requirements for PSD (Prevention of Significant Deterioration) Monitoring**

Section 1.1 Quality Control Program, section 1.2 Pollutant Standards, and section 1.5 Reporting Requirements, shall apply to PSD monitoring as well as to other types of monitoring. However, section 1.3 Data Quality Assessment and section 1.4 Calculations for Data Quality Assessment, are modified as noted below in 1.6.1 and 1.7.1.

**1.6.1 Automated Methods**

**1.6.1.1 Precision**

Refer to 1.3.1.1 for test procedures and to 1.7.1.1 for calculation procedures.

**1.6.1.2 Accuracy**

Refer to 1.3.1.2 for test procedures with the following exception. Each sampling quarter audit each analyzer that monitors for SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub>, or CO at least once. Calculation procedures are specified in 1.7.1.2.

**1.6.2 Manual Methods**

**1.6.2.1 Precision**

For a PSD monitoring network, one sampling site must have collocated samplers. The site with the highest expected 24-hour pollutant concentration must be selected. The two samplers must be within four meters of each other but at least two meters apart to preclude airflow interference. Calibration, sampling and analysis must be the same for both collocated samplers as well as for all other samplers in the network. The collocated samplers must be operated as a minimum every third day when continuous sampling is used. When a less frequent sample schedule

is used, the collocated samplers must be operated at least once each week. For each pair of collocated samplers, designate one sampler as the sampler which will be used to report air quality for the site and designate the other as the duplicate sampler. The differences in measured concentration between the two collocated samplers are used to calculate precision as described in 1.7.2.1.

#### 1.6.2.2 Accuracy

Refer to 1.3.2.2 for test procedures except for TSP and Pb. For TSP during each sampling quarter, audit the flow rate of each high volume sampler at least once. For Pb during each sampling quarter, analyze at least one audit sample in each of the two ranges each day that samples are analyzed.

### 1.7 Calculation for Data Quality Assessment for PSD Monitoring

#### 1.7.1 Automated Methods

##### 1.7.1.1 Precision

Each organization, at the end of each sampling quarter, shall calculate and report a precision probability interval for each analyzer. Directions for calculations are given below and directions for reporting are given in section 1.5. If monitoring data are invalidated during the period represented by a given precision check, the results of that precision check shall be excluded from the calculations. Calculate the percentage difference ( $d_i$ ) for each precision check using equation 1.

$$d_i = \frac{Y_i - X_i}{X_i} \times 100 \quad (1)$$

where:  $Y_i$  = analyzer's indicated concentration from the  $i$ -th precision check.

$X_i$  = known concentration of the test gas used for the  $i$ -th precision check.

For each instrument, calculate the quarterly average ( $\bar{d}_j$ ), using equation 2, and the standard deviation ( $S_j$ ), using equation 3.

$$\bar{d}_j = \frac{1}{n} \sum_{i=1}^n d_i \quad (2)$$

$$S_j = \sqrt{\frac{1}{n-1} \left[ \sum_{i=1}^n d_i^2 - \frac{1}{n} \left( \sum_{i=1}^n d_i \right)^2 \right]} \quad (3)$$

where  $n$  is the number of precision checks on the instrument made during the sampling quarter. For example,  $n$  should be 6 or 7 if span checks are made biweekly during a quarter.

Calculate the 95 percent probability limits for precision using equations 4 and 5.

$$\text{Upper 95 Percent Probability Limit} = \bar{d}_j + 1.96 S_j \quad (4)$$

$$\text{Lower 95 Percent Probability Limit} = \bar{d}_j - 1.96 S_j \quad (5)$$

Report the results in accordance with section 1.5.

#### 1.7.1.2 Accuracy

Each organization, at the end of each sampling quarter, shall calculate and report accuracy for each audit concentration for each analyzer audited during the quarter. Directions for calculations are given below (directions for reporting are given in section 1.5).

Calculate the percentage difference  $d_i$  for each audit concentration using equation 1 where  $Y_i$  is the analyzer's indicated concentration

from the  $i$ -th audit check and  $X_i$  is the known concentration of the audit gas used for the  $i$ -th audit check.

For each instrument, calculate the quarterly average  $\bar{d}_j$  and the standard deviation  $S_j$ , using equations 2 and 3, where  $n$  is the number of audit checks.

Calculate the 95 percent probability limits for accuracy using equations 4 and 5. Report the results in accordance with section 1.5.

## 1.7.2 Manual Methods

### 1.7.2.1 Precision

Estimates of precision for TSP, SO<sub>2</sub>, NO<sub>2</sub>, and Pb are calculated quarterly from results obtained from the collocation of two samplers at one site as described in section 1.6.2.1. For the paired measurements, calculate the percentage difference  $d_i$  for each pollutant, using equation 1 where  $Y_i$  is the pollutant concentration measured by the duplicate sampler and  $X_i$  is the pollutant concentration measured by the sampler reporting air quality for the site. Calculate the quarterly average percentage difference  $\bar{d}_j$ , the standard deviation  $S_j$ , and the upper and lower 95 percent probability limits for precision, using equations 2, 3, 6 and 7.

Upper 95 Percent Probability

$$\text{Limit} = \bar{d}_j + 1.96 S_j / \sqrt{2} \quad (6)$$

Lower 95 Percent Probability

$$\text{Limit} = \bar{d}_j - 1.96 S_j / \sqrt{2} \quad (7)$$

Report the results in accordance with section 1.5.

### 1.7.2.2 Accuracy

At the end of each sampling quarter, each organization shall calculate and report the accuracy for each high volume sampler and for SO<sub>2</sub>, NO<sub>2</sub>, and Pb analyses. Calculate the percentage difference  $d_j$  for each high volume sampler and for SO<sub>2</sub>, NO<sub>2</sub>, and Pb analysis using equation 1 where  $Y_i$  is the indicated flow rate or indicated SO<sub>2</sub>, NO<sub>2</sub>, or Pb concentration and  $X_i$  is the known flow rate or known SO<sub>2</sub>, NO<sub>2</sub>, or Pb concentration from the i-th audit check.

Calculate the quarterly average  $d_j$  for each high volume sampler and SO<sub>2</sub>, NO<sub>2</sub>, or Pb analyses and the standard deviation  $S_j$ , using equations 2 and 3, where n is the number of audit checks.

Calculate the 95 percent probability limits for accuracy using equations 4 and 5. Report the results in accordance with section 1.5.

## 2. SITING OF AIR MONITORING STATIONS

### 2.1 Monitoring Objectives

Air monitoring stations shall be sited to meet two basic monitoring objectives. One objective is to determine maximum pollutant concentrations for each of the averaging times for which ambient air quality standards have been established. A second objective is to determine representative concentrations in populated areas. The total number of monitoring stations required to meet these objectives will vary, depending on the source, meteorology, topography, location of the source relative to populated areas, etc.

## **2.2. Approval**

The siting of all air monitoring stations must be approved by the Bureau of Air Quality Control prior to installation.

## **3. Sampling Probe Installation**

### **3.1 Probe Siting**

This section contains probe siting criteria to be applied to ambient air quality monitors or monitor sample probes. These criteria must be followed as closely as possible to ensure the collection of valid and useful data.

The height above ground shall be 3-15 meters for all pollutants, except for particulates, carbon monoxide (microscale) and lead in which cases it shall be 2-15, 2.5-3.5, and 2-7 meters, respectively.

The distance from the vertical and horizontal supporting structures shall be greater than 1 meter, except when probe is located on rooftop, in which case it shall be greater than 2 meters from walls, parapets, or penthouses.

The distance from trees shall be greater than 20 meters.

The distance from obstacles, such as buildings, must be at least twice the height the obstacle protrudes above the particulate or lead sampler or the inlet probe for other pollutants.

Airflow must be unrestricted for at least 270° around particulate and lead samplers and inlet probes for other pollutants, or at least 180° if the probe is on the side of a building.

Particulate samplers and inlet probes for other pollutants shall not be located near localized sources such as furnace or incinerator flues and unpaved roads or unpaved parking lots.

**3.2 Probe Material**

Sampling probes and the lines connecting them to the analyzers must be constructed of teflon or pyrex glass when sampling for sulfur dioxide, nitrogen dioxide, and ozone.

**3.3 Sample Residence Time**

The sample residence time, from the inlet of the probe to the inlet of the analyzer, must be less than 20 seconds.

Revision B

Arizona Testing Manual for Air Pollutant Emission

February 7, 1983

The Testing Manual is revised to incorporate changes to existing test methods and new test methods which have been promulgated by the Federal Environmental Protection Agency since the last revision on May 19, 1980. Arizona Test Methods A2 and A3 are added to provide a simplified particulate test method for certain sources having low stack humidity, and to provide a test method for determination of gaseous emissions from bulk gasoline loading terminals, respectively. The latter is applicable in counties which adopt Phase One gasoline vapor recovery programs.

The test limits for certification of visible emissions observers by the Bureau of Air Quality Control have also been revised. The maximum allowable deviation of 15% from the smoke generator transmissometer reading at the random 25 opacity settings for either black or white smoke has been deleted, and the maximum allowable average deviation of 7.5 percent has been reduced to 6.0 percent. Experience has demonstrated that candidates for certification may exceed the maximum allowable deviation under highly variable field testing conditions while achieving fully acceptable average deviations. Since compliance with the specified visible emissions limitations in the regulations is based on the average of 24 consecutive observations during any visible emissions test, the limit on individual observations is not applicable.

**ARIZONA TESTING MANUAL FOR  
AIR POLLUTANT EMISSIONS**

Revision Control Record

Revision No.	Date	Section	Description of Revision
N/C	09-30-78	A11	Issued
A	05-19-80	2 3	Revised P 2.1-1 of 8 1. Update Method 11 to revisions of January 10, 1978 2. Update Method 16 to revisions of January 12, 1979 3. Add Reference Method 19 4. Add Reference Method 20
B	02-07-83	1  2 3  5 6	Revised Section 1.1.3 Updated Exhibit 1.1.3-1 Updated Exhibit 1.2-2 Revised Exhibit 1.2-2 Revised Exhibit 1.4.1-1 Added Method A2 Added Method A3 Added Methods 5A, 12, 22, 24, & 25 Added Alternate to Method 9 Updated Methods 13A, 13B, & 14 Updated Methods 101, 102, 106, & 107 Added Method 101A Added 40 CFR Part 61 Appendix C

ARIZONA TESTING MANUAL FOR  
AIR POLLUTANT EMISSIONS

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**Appendix C**

***Maricopa County Rules to be incorporated into the SIP***

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## **SECTION 500 - MONITORING AND RECORDS**

**501 REPORTING REQUIREMENTS:** The owner and/or operator of any air pollution source shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

**502 DATA REPORTING:** When requested by the Control Officer, a person shall furnish to the Department information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with these rules. The owner and/or operator of a source requested to submit information under Section 501 of this rule may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

**503 EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:** Upon request of the Control Officer and as directed by the Control Officer, the owner and/or operator of any source which emits or may emit oxides of nitrogen (NO<sub>x</sub>) or volatile organic compounds (VOC) shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO<sub>x</sub> and VOC from that source. At a minimum, the emission statement shall contain all information required by the Consolidated Emissions Reporting Rule in 40 CFR 51, Subpart A, Appendix A, Table 2A, which is incorporated by reference in Appendix G of these rules. The statement shall contain emissions for the time period specified by the Control Officer. The statement shall also contain a certification by a responsible official of the company that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Statements shall be submitted annually to the Department. The Control Officer may waive this requirement for the owner and/or operator of any source which emits less than 25 tons per year of oxides of nitrogen or volatile organic compounds with an approved emission inventory for sources based on AP-42 or other methodologies approved by the Administrator.

**504 RETENTION OF RECORDS:** Information and records required by applicable requirements and copies of summarizing reports recorded by the owner and/or operator and submitted to the Control Officer shall be retained by the owner and/or operator for five years after the date on which the information is recorded or the report is submitted. Non-Title V sources may retain such information, records, and reports for less than five years, if otherwise allowed by these rules.

**505 ANNUAL EMISSIONS INVENTORY REPORT:**

**505.1** Upon request of the Control Officer and as directed by the Control Officer, the owner and/or operator of a business shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.

**505.2** The annual emissions inventory report shall be in the format provided by the Control Officer.

**505.3** The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03, and Rule 372-Maricopa County Hazardous Air Pollutants (HAPs) Program of these rules.

**Appendix D**

***Pima County Rules to be incorporated into the SIP***

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## 17.12.040 - Reporting requirements.

A.

The owner or operator of any source shall report to the Control Officer any emissions in excess of the limits established by this Chapter or the applicable permit. The report shall be in 2 parts as specified below:

1.

Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from subsection (B).

2.

Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (1).

B.

The excess emissions report shall contain the following information:

1.

The identity of each stack or other emission point where the excess emissions occurred;

2.

The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

3.

The time and duration or expected duration of the excess emissions;

4.

The identity of the equipment from which the excess emissions emanated;

5.

The nature and cause of the emissions;

6.

The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;

7.

The steps that were or are being taken to limit the excess emissions; and

8.

If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

C.

In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B).

*(Ord. 2006-9 § 1 (part), 2006; Ord. 2005-43 § 2 (part), 2005)*

#### **17.24.040 - Reporting for compliance evaluations.**

When the control officer has reasonable cause to believe that a person is emitting or capable of emitting an air contaminant to the air or is violating a provision of the Title, a permit condition, or a requirement of a conditional order issued according to this title, he may require in writing that such person produce all existing books, records, or other documents which might reasonably contain evidence needed to determine compliance or noncompliance with this title. Such information shall be supplied to the control officer promptly upon request or in accordance with other conditions stated herein.

*(Ord. 1993-128 § 6 (part), 1993)*

**Appendix E**

*Authorizing Statutes*

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49-104. Powers and duties of the department and director

A. The department shall:

1. Formulate policies, plans and programs to implement this title to protect the environment.
2. Stimulate and encourage all local, state, regional and federal governmental agencies and all private persons and enterprises that have similar and related objectives and purposes, cooperate with those agencies, persons and enterprises and correlate department plans, programs and operations with those of the agencies, persons and enterprises.
3. Conduct research on its own initiative or at the request of the governor, the legislature or state or local agencies pertaining to any department objectives.
4. Provide information and advice on request of any local, state or federal agencies and private persons and business enterprises on matters within the scope of the department.
5. Consult with and make recommendations to the governor and the legislature on all matters concerning department objectives.
6. Promote and coordinate the management of air resources to assure their protection, enhancement and balanced utilization consistent with the environmental policy of this state.
7. Promote and coordinate the protection and enhancement of the quality of water resources consistent with the environmental policy of this state.
8. Encourage industrial, commercial, residential and community development that maximizes environmental benefits and minimizes the effects of less desirable environmental conditions.
9. Assure the preservation and enhancement of natural beauty and man-made scenic qualities.
10. Provide for the prevention and abatement of all water and air pollution including that related to particulates, gases, dust, vapors, noise, radiation, odor, nutrients and heated liquids in accordance with article 3 of this chapter and chapters 2 and 3 of this title.
11. Promote and recommend methods for the recovery, recycling and reuse or, if recycling is not possible, the disposal of solid wastes consistent with sound health, scenic and environmental quality policies. Beginning in 2014, the department shall report annually on its revenues and expenditures relating to the solid and hazardous waste programs overseen or administered by the department.
12. Prevent pollution through the regulation of the storage, handling and transportation of solids, liquids and gases that may cause or contribute to pollution.
13. Promote the restoration and reclamation of degraded or despoiled areas and natural resources.
14. Assist the department of health services in recruiting and training state, local and district health department personnel.
15. Participate in the state civil defense program and develop the necessary organization and facilities to meet wartime or other disasters.
16. Cooperate with the Arizona-Mexico commission in the governor's office and with researchers at universities in this state to collect data and conduct projects in the United States and Mexico on issues that are within the scope of the department's duties and that relate to quality of life, trade and economic development in this state in a manner that will help the Arizona-Mexico commission to assess and

enhance the economic competitiveness of this state and of the Arizona-Mexico region.

17. Unless specifically authorized by the legislature, ensure that state laws, rules, standards, permits, variances and orders are adopted and construed to be consistent with and no more stringent than the corresponding federal law that addresses the same subject matter. This provision shall not be construed to adversely affect standards adopted by an Indian tribe under federal law.

B. The department, through the director, shall:

1. Contract for the services of outside advisers, consultants and aides reasonably necessary or desirable to enable the department to adequately perform its duties.

2. Contract and incur obligations reasonably necessary or desirable within the general scope of department activities and operations to enable the department to adequately perform its duties.

3. Utilize any medium of communication, publication and exhibition when disseminating information, advertising and publicity in any field of its purposes, objectives or duties.

4. Adopt procedural rules that are necessary to implement the authority granted under this title, but that are not inconsistent with other provisions of this title.

5. Contract with other agencies, including laboratories, in furthering any department program.

6. Use monies, facilities or services to provide matching contributions under federal or other programs that further the objectives and programs of the department.

7. Accept gifts, grants, matching monies or direct payments from public or private agencies or private persons and enterprises for department services and publications and to conduct programs that are consistent with the general purposes and objectives of this chapter. Monies received pursuant to this paragraph shall be deposited in the department fund corresponding to the service, publication or program provided.

8. Provide for the examination of any premises if the director has reasonable cause to believe that a violation of any environmental law or rule exists or is being committed on the premises. The director shall give the owner or operator the opportunity for its representative to accompany the director on an examination of those premises. Within forty-five days after the date of the examination, the department shall provide to the owner or operator a copy of any report produced as a result of any examination of the premises.

9. Supervise sanitary engineering facilities and projects in this state, authority for which is vested in the department, and own or lease land on which sanitary engineering facilities are located, and operate the facilities, if the director determines that owning, leasing or operating is necessary for the public health, safety or welfare.

10. Adopt and enforce rules relating to approving design documents for constructing, improving and operating sanitary engineering and other facilities for disposing of solid, liquid or gaseous deleterious matter.

11. Define and prescribe reasonably necessary rules regarding the water supply, sewage disposal and garbage collection and disposal for subdivisions. The rules shall:

(a) Provide for minimum sanitary facilities to be installed in the subdivision and may require that water systems plan for future needs and be of adequate size and

capacity to deliver specified minimum quantities of drinking water and to treat all sewage.

(b) Provide that the design documents showing or describing the water supply, sewage disposal and garbage collection facilities be submitted with a fee to the department for review and that no lots in any subdivision be offered for sale before compliance with the standards and rules has been demonstrated by approval of the design documents by the department.

12. Prescribe reasonably necessary measures to prevent pollution of water used in public or semipublic swimming pools and bathing places and to prevent deleterious conditions at such places. The rules shall prescribe minimum standards for the design of and for sanitary conditions at any public or semipublic swimming pool or bathing place and provide for abatement as public nuisances of premises and facilities that do not comply with the minimum standards. The rules shall be developed in cooperation with the director of the department of health services and shall be consistent with the rules adopted by the director of the department of health services pursuant to section 36-136, subsection H, paragraph 10.

13. Prescribe reasonable rules regarding sewage collection, treatment, disposal and reclamation systems to prevent the transmission of sewage borne or insect borne diseases. The rules shall:

(a) Prescribe minimum standards for the design of sewage collection systems and treatment, disposal and reclamation systems and for operating the systems.

(b) Provide for inspecting the premises, systems and installations and for abating as a public nuisance any collection system, process, treatment plant, disposal system or reclamation system that does not comply with the minimum standards.

(c) Require that design documents for all sewage collection systems, sewage collection system extensions, treatment plants, processes, devices, equipment, disposal systems, on-site wastewater treatment facilities and reclamation systems be submitted with a fee for review to the department and may require that the design documents anticipate and provide for future sewage treatment needs.

(d) Require that construction, reconstruction, installation or initiation of any sewage collection system, sewage collection system extension, treatment plant, process, device, equipment, disposal system, on-site wastewater treatment facility or reclamation system conform with applicable requirements.

14. Prescribe reasonably necessary rules regarding excreta storage, handling, treatment, transportation and disposal. The rules shall:

(a) Prescribe minimum standards for human excreta storage, handling, treatment, transportation and disposal and shall provide for inspection of premises, processes and vehicles and for abating as public nuisances any premises, processes or vehicles that do not comply with the minimum standards.

(b) Provide that vehicles transporting human excreta from privies, septic tanks, cesspools and other treatment processes shall be licensed by the department subject to compliance with the rules. The department may require payment of a fee as a condition of licensure. After the effective date of this amendment to this section, the department shall establish by rule a fee as a condition of licensure, including a maximum fee. As part of the rule making process, there must be public notice and comment and a review of the rule by the joint legislative budget committee. After September 30, 2013, the department shall not increase that fee by rule without specific statutory authority for the increase. The fees shall be

deposited, pursuant to sections 35-146 and 35-147, in the solid waste fee fund established by section 49-881.

15. Perform the responsibilities of implementing and maintaining a data automation management system to support the reporting requirements of title III of the superfund amendments and reauthorization act of 1986 (P.L. 99-499) and title 26, chapter 2, article 3.

16. Approve remediation levels pursuant to article 4 of this chapter.

17. Establish or revise fees by rule pursuant to the authority granted under title 44, chapter 9, article 8 and chapters 4 and 5 of this title for the department to adequately perform its duties. All fees shall be fairly assessed and impose the least burden and cost to the parties subject to the fees. In establishing or revising fees, the department shall base the fees on:

(a) The direct and indirect costs of the department's relevant duties, including employees salaries and benefits, professional and outside services, equipment, in-state travel and other necessary operational expenses directly related to issuing licenses as defined in title 41, chapter 6 and enforcing the requirements of the applicable regulatory program.

(b) The availability of other funds for the duties performed.

(c) The impact of the fees on the parties subject to the fees.

(d) The fees charged for similar duties performed by the department, other agencies and the private sector.

C. The department may:

1. Charge fees to cover the costs of all permits and inspections it performs to ensure compliance with rules adopted under section 49-203, except that state agencies are exempt from paying the fees. Monies collected pursuant to this subsection shall be deposited, pursuant to sections 35-146 and 35-147, in the water quality fee fund established by section 49-210.

2. Contract with private consultants for the purposes of assisting the department in reviewing applications for licenses, permits or other authorizations to determine whether an applicant meets the criteria for issuance of the license, permit or other authorization. If the department contracts with a consultant under this paragraph, an applicant may request that the department expedite the application review by requesting that the department use the services of the consultant and by agreeing to pay the department the costs of the consultant's services. Notwithstanding any other law, monies paid by applicants for expedited reviews pursuant to this paragraph are appropriated to the department for use in paying consultants for services.

D. The director may:

1. If the director has reasonable cause to believe that a violation of any environmental law or rule exists or is being committed, inspect any person or property in transit through this state and any vehicle in which the person or property is being transported and detain or disinfect the person, property or vehicle as reasonably necessary to protect the environment if a violation exists.

2. Authorize in writing any qualified officer or employee in the department to perform any act that the director is authorized or required to do by law.

49-106. Statewide application of rules

The rules adopted by the department apply and shall be observed throughout this state, or as provided by their terms, and the appropriate local officer, council or board shall enforce them. This section does not limit the authority of local governing bodies to adopt ordinances and rules within their respective jurisdictions if those ordinances and rules do not conflict with state law and are equal to or more restrictive than the rules of the department, but this section does not grant local governing bodies any authority not otherwise provided by separate state law.

49-404. State implementation plan

A. The director shall maintain a state implementation plan that provides for implementation, maintenance and enforcement of national ambient air quality standards and protection of visibility as required by the clean air act.

B. The director may adopt rules that describe procedures for adoption of revisions to the state implementation plan.

C. The state implementation plan and all revisions adopted before September 30, 1992 remain in effect according to their terms, except to the extent otherwise provided by the clean air act, inconsistent with any provision of the clean air act, or revised by the administrator. No control requirement in effect, or required to be adopted by an order, settlement agreement or plan in effect, before the enactment of the clean air act in any area which is a nonattainment or maintenance area for any air pollutant may be modified after enactment in any manner unless the modification insures equivalent or greater emission reductions of the air pollutant. The director shall evaluate and adopt revisions to the plan in conformity with federal regulations and guidelines promulgated by the administrator for those purposes until the rules required by subsection B are effective.

49-406. Nonattainment area plan

A. For any ozone, carbon monoxide or particulate nonattainment or maintenance area the governor shall certify the metropolitan planning organization designated to conduct the continuing, cooperative and comprehensive transportation planning process for that area under 23 United States Code section 134 as the agency responsible for the development of a nonattainment or maintenance area plan for that area.

B. For any ozone, carbon monoxide or particulate nonattainment or maintenance area for which no metropolitan planning organization exists, the department shall be certified as the agency responsible for development of a nonattainment or maintenance area plan for that area.

C. For any ozone, carbon monoxide or particulate nonattainment or maintenance area, the department, the planning agency certified pursuant to subsection A of this section on behalf of elected officials of affected local government, the county air pollution control department or district, and the department of transportation shall, by November 15, 1992, and from time to time as necessary, jointly review and update planning procedures or develop new procedures.

D. In preparing the procedures described in subsection C of this section, the department, the planning agency certified pursuant to subsection A of this section on behalf of elected officials of affected local government, the county air pollution control department or district, and the department of transportation shall determine

which elements of each revised implementation plan will be developed, adopted, and implemented, through means including enforcement, by the state and which by local governments or regional agencies, or any combination of local governments, regional agencies or the state.

E. The department, the planning agency certified pursuant to subsection A of this section on behalf of elected officials of affected local government, the county air pollution control department or district, and the department of transportation shall enter into a memorandum of agreement for the purpose of coordinating the implementation of the procedures described in subsection C and D of this section.

F. At a minimum, the memorandum of agreement shall contain:

1. The relevant responsibilities and authorities of each of the coordinating agencies.
2. As appropriate, procedures, schedules and responsibilities for development of nonattainment or maintenance area plans or plan revisions and for determining reasonable further progress.
3. Assurances for adequate plan implementation.
4. Procedures and responsibilities for tracking plan implementation.
5. Responsibilities for preparing demographic projections including land use, housing, and employment.
6. Coordination with transportation programs.
7. Procedures and responsibilities for adoption of control measures and emissions limitations.
8. Responsibilities for collecting air quality, transportation and emissions data.
9. Responsibility for conducting air quality modeling.
10. Responsibility for administering and enforcing stationary source controls.
11. Provisions for the timely and periodic sharing of all data and information among the signatories relating to:
  - (a) Demographics.
  - (b) Transportation.
  - (c) Emissions inventories.
  - (d) Assumptions used in developing the model.
  - (e) Results of modeling done in support of the plan.
  - (f) Monitoring data.

G. Each agency that commits to implement any emission limitation or other control measure, means or technique contained in the implementation plan shall describe that commitment in a resolution adopted by the appropriate governing body of the agency. The resolution shall specify the following:

1. Its authority for implementing the limitation or measure as provided in statute, ordinance or rule.
2. A program for the enforcement of the limitation or measure.
3. The level of personnel and funding allocated to the implementation of the measure.

H. The state, in accordance with the rules adopted pursuant to section 49-404, and the governing body of the metropolitan planning organization shall adopt each nonattainment or maintenance area plan developed by a certified metropolitan planning organization. The adopted nonattainment or maintenance area plan shall be transmitted to the department for inclusion in the state implementation plan provided for under section 49-404.

I. After adoption of a nonattainment or maintenance area plan, if on the basis of the reasonable further progress determination described in subsection F of this section or other information, the control officer determines that any person has failed to implement an emission limitation or other control measure, means or technique as described in the resolution adopted pursuant to subsection G of this section, the control officer shall issue a written finding to the person, and shall provide an opportunity to confer. If the control officer subsequently determines that the failure has not been corrected, the county attorney, at the request of the control officer, shall file an action in superior court for a preliminary injunction, a permanent injunction, or any other relief provided by law.

J. After adoption of a nonattainment or maintenance area plan, if, on the basis of the reasonable further progress determination described in subsection F of this section or other information, the director determines that any person has failed to implement an emission limitation or other control measure, means or technique as described in the resolution adopted pursuant to subsection G of this section, and that the control officer has failed to act pursuant to subsection I of this section, the director shall issue a written finding to the person and shall provide an opportunity to confer. If the director subsequently determines that the failure has not been corrected, the attorney general, at the request of the director, shall file an action in superior court for a preliminary injunction, a permanent injunction, or any other relief provided by law.

K. Notwithstanding subsections A and B of this section, in any metropolitan area with a metropolitan statistical area population of less than two hundred fifty thousand persons, the governor shall designate an agency that meets the criteria of section 174 of the clean air act and that is recommended by the city that causes the metropolitan area to exist and the affected county. That agency shall prepare and adopt the nonattainment or maintenance area plan. If the governor does not designate an agency, the department shall be certified as the agency responsible for the development of a nonattainment or maintenance area plan for that area.

#### 49-425. Rules; hearing

A. The director shall adopt such rules as he determines are necessary and feasible to reduce the release into the atmosphere of air contaminants originating within the territorial limits of the state or any portion thereof and shall adopt, modify, and amend reasonable standards for the quality of, and emissions into, the ambient air of the state for the prevention, control and abatement of air pollution. Additional standards shall be established for particulate matter emissions, sulfur dioxide emissions, and other air contaminant emissions determined to be necessary and feasible for the prevention, control and abatement of air pollution. In fixing such ambient air quality standards, emission standards or standards of performance, the director shall give consideration but shall not be limited to the relevant factors prescribed by the clean air act.

B. No rule may be enacted or amended except after the director first holds a public hearing after twenty days' notice of such hearing. The proposed rule, or any proposed amendment of a rule, shall be made available to the public at the time of notice of such hearing.

C. The department shall enforce the rules adopted by the director.

D. All rules enacted pursuant to this section shall be made available to the public at a reasonable charge upon request.