

**Commonwealth of Pennsylvania
Department of Environmental Protection**



**State Implementation Plan Revision
Section 110(a)(2)(A)-(M) Requirements
for Ozone and Fine Particulates**

November 2007

**Bureau of Air Quality
Pennsylvania Department of Environmental Protection
P.O. Box 8468
Harrisburg, PA 17105-8468
717-787-9495
www.depweb.state.pa.us**

**Kathleen A. McGinty
Secretary**

**Edward G. Rendell
Governor**

blank for two sided copying

State Implementation Plan Revision

Section 110(a)(2)(A)-(M) Requirements for Ozone and Fine Particulates

A State Implementation Plan (SIP) is a plan for each state that identifies how that state will attain and/or maintain the primary and secondary National Ambient Air Quality Standards (NAAQS). The SIP is a complex, fluid document containing regulations, source-specific requirements, non-regulatory items such as plans and inventories, and in some cases additional requirements promulgated by the U.S. Environmental Protection Agency (EPA). The initial SIPs for states were approved by on May 31, 1972. SIPs can be revised by the state with EPA approval as necessary. The federally enforceable SIP for Pennsylvania is compiled in 40 CFR Part 52, Subpart NN.

This SIP revision addresses those requirements of Section 110(a)(2)(A)-(M) of the Clean Air Act (CAA) that have not been addressed in other SIP revisions. It is a compilation of certain elements that describe how the Commonwealth of Pennsylvania will demonstrate how the eight-hour ozone and fine particulate (PM_{2.5}) NAAQS are being implemented, maintained and enforced. The elements of this SIP revision, once approved by EPA, will provide a federally enforceable written confirmation of how the Commonwealth will continue to comply with the Section 110(a)(2) requirements of the CAA.

Legislative authority for the Pennsylvania air quality program relating to the responsibilities in the Clean Air Act is codified in the Pennsylvania Air Pollution Control Act, 35 P.S. §§ 4001 – 4015 (APCA), including in section 4 of the APCA, which gives the Pennsylvania Department of Environmental Protection (DEP or Department) the power and duty to implement the provisions of the CAA in the Commonwealth. 35 P.S. § 4004(1).

Those requirements of Section 110(a)(2)(A)-(M) that are already in the approved SIP or recently submitted SIP revisions relate to: enforceable emission limits and schedules for compliance; monitoring, source testing and emissions reporting; recordkeeping and reporting requirements; and permit fees. Some requirements, such as those for intergovernmental consultation, air quality modeling and compliance with part D of the CAA, are fulfilled during the development and submission to EPA as a SIP revision of attainment plans and related requirements due under subpart 1 and, in the case of ozone, subpart 2 of the CAA.

In the case of ozone, Pennsylvania submitted the ozone attainment demonstration for the Philadelphia-Wilmington-Atlantic City moderate nonattainment area on August 29, 2007. Pennsylvania submitted redesignation requests and maintenance plan SIP revisions for the 16 other ozone nonattainment areas in the Commonwealth, as follows:

AREA	SUBMITTED
Lancaster County	9/20/06
Tioga County	9/28/06
Franklin County	12/14/06
Reading	1/25/07
Greene County	1/25/07
Johnstown	2/8/07
Altoona	3/30/07
Harrisburg-Lebanon-Carlisle	3/27/07
Youngstown-Warren-Sharon (Mercer County, PA)	3/27/07
Erie County	5/4/07
Pittsburgh-Beaver Valley	5/4/07
Scranton-Wilkes-Barre	6/12/07
State College	6/12/07
York	6/14/07
Clearfield-Indiana	6/14/07
Allentown-Bethlehem-Easton	6/26/07

Requirements for a public comment process are set forth in Section 110(a)(2) of the CAA and 40 CFR 51.102(d). DEP held a public hearing to receive comments on this proposed SIP revision on Tuesday, October 16, 2007, at 1 p.m. at the DEP Southcentral Regional Office, 909 Elmerton Avenue, Susquehanna Room A, Harrisburg, PA 17110. The comment period ended at the close of business on Tuesday, October 16, 2007. No comments were received.

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(B)	<p><i>provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality, and upon request, make such data available to the Administrator;</i></p>	<p>Section 4(17) of the APCA, 35 P.S. § 4004, provides the authority for DEP to “determine by means of field studies and sampling the degree of air pollution existing in any part of the Commonwealth.” DEP establishes, operates, and maintains a network of ambient air monitors throughout Pennsylvania, excluding Philadelphia and Allegheny Counties. Philadelphia Air Management Services (AMS) operates its monitoring network as a Pennsylvania approved program under the “Agreement for Implementation of the Philadelphia County Air Pollution Control Program,” dated July 1, 1998. The Allegheny County Health Department (ACHD) operates its monitoring network as a Pennsylvania approved program under the “Agreement for Implementation of the Allegheny County Air Pollution Control Program,” dated October 31, 1998. These agreements address data collection, data access and reporting and will be provided to EPA as supplemental material.</p> <p>The Pennsylvania network consists only of monitors that have been designated by EPA as either Reference or Equivalent monitors. All ambient air monitors are subjected to the Quality Assurance requirements of 40 CFR Part 58, Appendix A. In addition, all samplers are located at sites that have met the minimum siting requirements of Part 58, Appendix E.</p> <p>In order to keep EPA informed of changes to the sampling network, DEP and the local air agencies provide EPA Region III with prior notification of any planned changes to the network. As needed, details of these changes and anticipated approvals of the changes are communicated to EPA. On an annual basis, DEP sends EPA a summary table of all the changes to the network. This summary also provides for a description of each change, the reason for each change, and any other information relevant to the change.</p> <p>DEP and the local agencies collect and report to EPA all ambient air quality data for SO₂, CO, O₃, NO₂, PB, PM₁₀, and PM_{2.5}. The reports comply with the federal requirements of 40 CFR 58.35. As necessary, the submitted data is reviewed, edited, validated, and entered into the EPA air quality system (AQS) for updating pursuant to prescribed AQS procedures. The EPA AQS receives each report within 90 days after the end of the quarterly reporting period.</p> <p>DEP analyzes such air quality data (including data from the local agencies) to determine attainment status or progress, as demonstrated by the redesignation requests submitted and/or approved during calendar years 2006 and 2007 as well as the Commonwealth’s August 29, 2007 attainment demonstration SIP revision submittal.</p>

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(C)	<p><i>include a program to provide for the enforcement of the measures described in subparagraph (A) and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;</i></p>	<p>Sections 4 and 8 of the APCA, 35 P.S. §§ 4004 and 4008, provide adequate authority for DEP to enforce appropriate limitations and other control measures. Section 6.1(k) of the APCA, 35 P.S. § 4006.1(k), provides that DEP shall require revisions to any permit to incorporate applicable standards and regulations promulgated under the Clean Air Act after issuance of a Title V permit.</p> <p>Section 9.1 of the APCA, 35 P.S. § 4009.1, provides that DEP may assess civil penalties for violations of the APCA, regulations adopted under the APCA, Department orders or terms, and conditions of plan approvals and operating permits. Additionally, Section 7.1 of the APCA, 35 P.S. § 4007.1, authorizes DEP to withhold plan approvals, state operating permits, or Title V permits where an applicant or related party has shown a lack of ability or intention to comply with the APCA.</p> <p>Furthermore, the 16 maintenance plans for the 8-hour ozone NAAQS submitted by the Commonwealth, as well as the Philadelphia attainment demonstration SIP revision, include enforceable emissions limits, control measures, fees and compliance schedules by describing regulations upon which the plans rely.</p> <p>The Commonwealth's enforceable emission limitations and other control measures are covered in those provisions of the APCA and Pennsylvania Code, Title 25, Environmental Protection, Article III, Chapters 121-145 (25 Pa. Code Chs. 121-145); Title 67, Chapters 175 – 177 that are listed in 40 CFR §52.2020(c)(1); ACHD Regulations, Parts A through I to Articles XX and XXI that are listed in 40 CFR 52.2020(c)(2); Philadelphia Title 3 Air Management Code and Philadelphia AMS Regulations I, II, III, IV, V, VII, VIII, XI, and XIII that are listed in 40 CFR 52.2020(c)(3); and source specific provisions codified at 40 CFR 52.2020(d)(1).</p> <p>Elements of the program for enforcement are found in the monitoring, recordkeeping and reporting requirements for sources in these control measures as well as those provisions of: 25 Pa. Code Chapter 127, subchapters D and E that are listed in 40 CFR 52.2020(c)(1); those provisions of ACHD Regulations, Parts H and I to Articles XX and XXI that are listed in 40 CFR 52.2020(c)(2); and those provisions of the Philadelphia Title 3 Air Management Code and Philadelphia AMS Regulation I that are listed in 40 CFR 52.2020(c)(3).</p>

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(E)(i)	<p><i>provide</i></p> <p><i>(i) 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, and authority under state (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of federal or state law from carrying out such implementation plan or portion thereof);</i></p>	<p>State Agency Legal Authority: The Commonwealth’s enforceable emission limitations and other control measures are covered in the APCA and those provisions of Pennsylvania Code Title 25, Environmental Protection, Article III, Chapters 121-145 (25 Pa. Code Chs. 121-145) and Title 67, Chapters 175-177 that are listed in 40 CFR § 52.2020(c)(1); those provisions of ACHD Regulations, Parts A through I to Articles XX and XXI that are listed in 40 CFR §52.2020(c)(2); those provisions of Philadelphia Title 3 Air Management Code and Philadelphia AMS Regulations I, II, III, IV, V, VII, VIII, XI, and XIII that are listed in 40 CFR 52.2020(c)(3); and source specific provisions codified at 40 CFR 52.2020(d)(1). The regulations in the <i>Pennsylvania Code</i> are duly adopted by the Environmental Quality Board. Those adopted by the local air agencies, namely ACHD and Philadelphia AMS, are duly adopted by the county Board of Health, enacted by the County Council and approved by the Chief Executive and the Air Pollution Control Board, respectively, pursuant to section 12 of the APCA (35 P.S. § 4012). Where these provisions relate to section 110 requirements, SIP revisions have been submitted to and approved by EPA. EPA-approved SIP revisions are codified at 40 CFR part 52, subpart NN. The Commonwealth has an EPA-approved air permitting program for both major and minor facilities, which ensures that all applicable requirements are included in the facility permit.</p> <p>Local Agency Legal Authority: Section 12 of APCA (35 P.S. § 4012) establishes the ability of the two pre-existing local air agencies to continue to operate their own programs. Authority for AMS is provided by Title 3, Air Management Code and for ACHD by Article XXI and County Ordinance 16782</p> <p>State Revenue: Section 6.3 of APCA (35 P.S. § 4006.3) authorizes the Department to establish fees sufficient to cover the indirect and direct costs of administering the plan approval and operating permit program including Title V and costs of administering certain committees. <i>25 Pa. Code</i> §127.701 as is currently approved in the SIP establishes fees to cover the direct and indirect costs of administering the air pollution control planning process, operating permit program, certain committee operation and to support the air pollution control program authorized by state statute. The APCA also authorizes the establishment of fees to cover non-Title V costs. The air quality program also receives revenue from fines and penalties (Clean Air Fund) and federal funds under Section 105 and 103 of the CAA.</p>

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(E)(i) (continued)		<p>(continued)</p> <p>Act, special federal funds for PM2.5, and state general appropriations.</p> <p>Local Revenue: The local agencies receive Section 105 and 103 funds directly from EPA, have their own authority to collect Title V and other fees, and also receive revenue from fines and penalties that are restricted for air quality program purposes.</p> <p>State Staffing: DEP believes that Pennsylvania has adequate personnel to carry out the SIP with respect to 8-hour ozone and PM2.5 NAAQS requirements. Should EPA determine that the DEP lacks adequate personnel to carry out the SIP, EPA may issue a finding with respect to that deficiency, which DEP would have a legal obligation to correct.</p> <p>DEP's agreements with ACHD and AMS (referenced above) assure that these local agencies similarly have the personnel, funding and authority to carry out their respective obligations under the SIP.</p>
§110(a)(2)(E)(iii)	<p><i>(iii) necessary assurances that, where the state has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the state has responsibility for ensuring adequate implementation of such plan provision;</i></p>	<p>Section 12 of the APCA reserved powers to political subdivisions to enact air pollution control ordinances, which are not less stringent than the requirements of the Clean Air Act, APCA, and regulations adopted under the acts. The APCA authorizes only two local air pollution control programs in the Commonwealth, which are administered by the Philadelphia AMS and the ACHD. DEP maintains agreements with the two local air agencies that DEP relies on for implementation of the SIP in Allegheny and Philadelphia counties. DEP has approved the local programs in the areas of financial assistance, annual workload projection, emissions reporting, source monitoring and reporting, enforcement, ambient air monitoring and reporting, and air quality permitting. The Department has responsibility for ensuring adequate implementation of SIP provisions by local authorities under section 12 of the APCA, 35 P.S. § 4012. The submission of a description of the implementation of the local air pollution control program along with a detailed accounting of the costs of implementation is required on an annual basis.</p>

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(F)	<p><i>require, as may be prescribed by the Administrator—</i></p> <p><i>(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps by owners or operators of stationary sources to monitor emissions from such sources,</i></p> <p><i>(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and</i></p> <p><i>(iii) correlation of such reports by the state agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;</i></p>	<p>Requirements of §110(a)(2)(F)(i) and (ii) are already addressed in the approved SIP. The Commonwealth has the responsibility of making all records, reports or information obtained by the Department or referred to at public hearings under the provisions of the APCA available to the public, except to the extent the records, reports or information are protected by confidentiality pursuant to APCA section 13.2, 35 P.S. § 4013.2. The types of records DEP routinely provides access to include notifications, inspection reports, notices of violation, enforcement orders, applications, permit review letters, sample results, monitoring reports, permits, approvals and denials that would relate to §110(a)(2)(F). DEP generally makes information available for public access through its website, but also makes hard copy reports available upon written request.</p>
§110(a)(2)(G)	<p><i>provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;</i></p>	<p>Enabling authority for “Emergency Powers” is contained in Sections 5(5) and 6.2 of the APCA (35 P.S. §§ 4005(5) and 4006.2). The EQB has adopted 25 Pa. Code Chapter 137, ACHD has adopted Part F to Article XX/XXI and Philadelphia AMS has adopted Regulation IV, all of which cover air pollution episodes and the occurrence of an emergency due to the effects of pollutants on the health of persons. 25 Pa. Code Chapter 137, Part F to Article XX/XXI and Philadelphia AMS Regulation IV were approved into the SIP on May 31, 1972 (37 FR 10842), June 16, 1993 (58 FR 33203), June 12, 1998 (63 FR 32126), June 11, 2002 (67 FR 39854), and November 14, 2002 (67 FR 68935).</p>

Section 110(a) element	<i>Each implementation plan submitted by a State under this Act shall:</i>	Pennsylvania Implementation
§110(a)(2)(H)	<p><i>provide for revision of such plan—</i></p> <p><i>(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and</i></p> <p><i>(iii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements, or to otherwise comply with any additional requirements established under this Act;</i></p>	<p>Section 4(1) of the APCA, 35 P.S. § 4004(1), gives the Department the authority and duty to implement the provisions of the CAA. Section 5 of the APCA, 35 P.S. § 4005, gives the Environmental Quality Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution. In addition, 25 Pa. Code Chapter 122 adopts the federal NAAQS by reference. The Department has revised and will continue to revise the SIP as may be necessary when EPA revises the primary or secondary NAAQS and when, if ever, EPA finds the SIP is substantially inadequate to attain the NAAQS which it implements or otherwise to comply with the CAA. The Department has revised and will continue to revise the SIP to take advantage of improved or more expeditious methods to attain the NAAQS.</p>
§110(a)(2)(J) and §110(a)(2)(M) (participation)	<p><i>meet the applicable requirements of section 121 (relating to consultation) and section 127 (relating to public notification), provide for consultation and participation by local political subdivisions affected by the plan;</i></p>	<p>The APCA provides adequate authority for DEP's practices of consultation and participation in SIPs, as required under CAA Sections 121 and 127 and notification of NAAQS violations as required in CAA Section 127. It also provides authority for the public education efforts described in CAA Section 127. Section 4 of APCA, 35 P.S. § 4004, provides general enabling authority for interaction with the public and local government.</p> <p>DEP makes real-time and historical air quality information available on its Web site. In the four areas where violations have been most common in the past, DEP has formed, funded, and provided technical resources to Air Quality Partnerships. The Partnerships receive forecasts of potentially unhealthy air quality (including, but not limited to, violations of the NAAQS), and encourage specific actions, which can be taken to prevent standards from being exceeded.</p>