

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR QUALITY

Revised Section 111(d) State Plan for The Control of Mercury Emissions from Existing Coal-Fired Electric Steam Generating Units

March 15, 2007

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REVISED SECTION 111(d) STATE PLAN FOR THE CONTROL OF MERCURY EMISSIONS FROM EXISTING COAL-FIRED ELECTRIC STEAM GENERATING UNITS (EGUs)

TABLE OF CONTENTS

		Page
I.	Background/Introduction	1
II.	Public Participation [40 CFR § 60.23(c), (d), and (f)]	2
III.	Implementation of the Section 111(d) State Plan	4
IV.	Annual Emission Limitations and Non-Tradable Mercury Allowances Allocation for Coal-fired EGUs	4
V.	Inventory of Designated EGUs [40 CFR § 60.25(a)]	6
VI.	Compliance Schedule for Coal-fired EGUs [40 CFR § 60.24(a)]	13
VII.	Recordkeeping, Reporting and Monitoring Requirement [40 CFR § 60.25]	13
	a. General Monitoring and Reporting Requirements	
	b. Certification Procedures for Emissions Monitoring	
	c. Recordkeeping and Reporting Requirements	
	d. Additional Requirements	
VIII.	Legal Authority to Implement the State Plan [40 CFR § 60.26]	14

APPENDICES

APPENDIX A:	Emission Guidelines and Compliance Times for EGUs
APPENDIX B:	Public Participation Process
APPENDIX C:	Mercury Final Rulemaking – 25 Pa. Code, Chapter 123, Standards for Contaminants
APPENDIX D:	Legal Authority to Implement the State Plan
APPENDIX E:	PA Air Pollution Control Act, and Applicable Permitting Regulations

REVISED SECTION 111(d) STATE PLAN FOR THE CONTROL OF MERCURY EMISSIONS FROM EXISTING COAL-FIRED ELECTRIC STEAM GENERATING UNITS

I. BACKGROUND/INTRODUCTION

On May 18, 2005, the U.S. Environmental Protection Agency (EPA) finalized the Clean Air Mercury Rule (CAMR) to establish standards of performance for mercury emissions from new and existing coal-fired electric steam generating units (EGUs), as defined in Section 111 of the federal Clean Air Act (CAA). *See* 70 FR 28606. The federal Emission Guidelines (Guidelines) for existing EGUs are codified at 40 CFR Part 60, Subpart HHHH (attached hereto as Appendix A). These Guidelines apply to existing EGUs, which commenced construction, modification or reconstruction before January 30, 2004. On June 9, 2006, after considering the petitions for reconsideration and the comments received, EPA published a revision of the December 2000 Clean Air Act Section 112(n) finding regarding electric utility steam generating units; and standards of performance for new and existing electric utility steam generating units. *See* 71 FR 33388.

Under CAMR, each State receives an annual budget for mercury emissions from coal-fired EGUs with a nameplate capacity greater than 25 megawatts. A State can meet its CAMR budget either by participating in the EPA- managed cap-and-trade program or by demonstrating that the State mercury budgets codified in 40 CFR § 60.24(h)(3) (relating to emission standards and compliance schedule) and 40 CFR § 60.4140 (relating to state trading budgets), will not be exceeded in any year. States may adopt also more protective plans under Section 111 of the CAA. If a state does not participate in an EPA-managed cap and trade program, the state mercury budget established under CAMR "will serve as a firm cap." 70 Fed. Reg. 28624. By November 17, 2006, states must submit a plan to the EPA that meets the requirements of the 40 CFR § 60.24(h). If a state fails to submit a State Plan, as required in the final rule, then EPA will promulgate a Federal plan under Section 111(d)(2)(A) of the CAA. See 70 Fed. Reg. at 28632. The EPA has proposed the model rule under the CAMR as that Federal plan.

In the Commonwealth of Pennsylvania, seventy-three (73) designated EGUs presently operating at thirty-five (35) facility locations are subject to the State Plan. Consequently, the Department will implement and enforce the Pennsylvania-specific final-form mercury regulation for coal-fired EGUs and the elements of this State Plan to ensure that the mercury budget established under 40 CFR § 60.24(h)(3) is not exceeded.

Pennsylvania will not participate in the EPA-managed cap-and-trade program to reduce mercury emissions from coal fired EGUs. Consequently, new and existing EGUs in the Commonwealth of Pennsylvania will meet an annual mercury budget of 1.779 tons per year for Phase 1, which begins January 1, 2010. The Phase 2 requirements of the Pennsylvania-specific regulation will begin January 1, 2015 and will require that designated EGUs in Pennsylvania meet an annual mercury budget of 0.702 tons per year and each year thereafter. *See* 40 CFR § 60.24(h)(3).

The procedures for adoption and submittal of State Plans are codified in 40 CFR Part 60, Subpart B. The Subpart B provisions were amended by EPA to include specifications that

supersede the provisions in Subpart B regarding the schedule for submittal of State Plans to demonstrate compliance with annual EGU mercury budgets. The amendments require Section 111(d) State Plans for coal-fired EGUs be submitted to the EPA administrator no later than November 17, 2006.

The Section 111(d) State Plan must be as protective as the requirements in Subpart HHHH. The State Plan, developed in accordance with 40 CFR Part 60, Subpart B is being submitted to EPA for approval as the Commonwealth of Pennsylvania's Section 111(d) Plan. Consistent with the requirements of 40 CFR Parts 60, Subparts B, the State Plan includes a demonstration of legal authority, identification of enforceable mechanisms, an inventory of EGUs and emissions, emission limitations and compliance schedules demonstrating that they will result in compliance with the State's annual EGU mercury budget for the appropriate periods, emissions limitations, testing, monitoring, recordkeeping, and reporting requirements, a record of the public hearing, and provisions for the submittal of annual progress reports to EPA related to compliance and enforcement.

On June 24, 2006, the Pennsylvania Department of Environmental Protection published in the *Pennsylvania Bulletin* a public notice of its proposed mercury regulation rulemaking for a 60-day comment period and a notice of three public hearings. The three public hearings were held on July 25, 26 and 27, 2006. In the notice on the proposed rulemaking, the Department stated that the mercury regulation, if finalized, would be submitted to EPA as the State Plan to fulfill Pennsylvania's submission requirements under the federal Clean Air Mercury Rule.

The Pennsylvania-specific mercury regulation for coal-fired EGUs is codified in 25 Pa. Code §§ 123.201-123.215, 37 Pa.B. 907 (February 17, 2007). This rulemaking does not allow participation in the EPA-managed cap-and-trade program, but establishes mercury emission standards, annual emission limitations as part of a statewide nontradable mercury allowance program, and other requirements for the purpose of reducing mercury emissions from coal-fired EGUs. The Pennsylvania-specific mercury regulation establishes two compliance phases: January 1, 2010 to December 31, 2014, for Phase 1 and January 1, 2015, and each subsequent year thereafter for Phase 2. The owners and operators of designated EGUs may comply with the annual emission limitations on a unit-by-unit basis, by a facility-wide compliance demonstration or by a system-wide compliance demonstration. The annual emission limitations established for each designated EGU ensures that EGUs in the Commonwealth will not exceed the annual mercury budget established under 40 CFR § 60.24(h)(3).

In accordance with 40 CFR § 60.23(f)(1), the Department is submitting the Section 111(d) State Plan to reduce mercury emissions from designated EGUs in Pennsylvania to EPA for approval.

II. PUBLIC PARTICIPATION PROCESS [40 CFR § 60.23(c), (d) and (f)]

Prior to submitting the Section 111(d) State Plan to EPA for approval, the Department held three public hearings for the purpose of accepting testimony on the proposed State Plan to reduce mercury emissions from all designated coal-fired EGUs in Pennsylvania. Documentation of the public participation process is provided in Appendix B (relating to public participation

process). The public hearings were held at 1:00 PM on September 6, 2006 at the following locations:

Rachel Carson State Office Building 2nd Floor Auditorium 400 Market Street Harrisburg, PA 17105-8468

Southwest Regional Office Waterfront A&B Conference Room 400 Waterfront Drive Pittsburgh, PA 15222-4745

Southeast Regional Office Delaware Room 2 East Main Street Norristown, PA 19401

As required under 40 CFR § 60.23, the Department provided notice of the date, time and location of each of the hearings at least 30 days prior to the scheduled date of the hearing. The Notice of Public Hearings and opportunity to provide written comments was published in the *Pennsylvania Bulletin* on August 5, 2006 (36 Pa.B. 4269). Notice of the public hearings were also published at least 30 days in advance in the following nine newspapers of general circulation across the Commonwealth of Pennsylvania: Patriot News, Delaware County Daily News, Wilkes-Barre Times Leader, The Times Herald, The Morning Call, Bucks County Courier Times, Pittsburgh-Post Gazette, Williamsport Sun-Gazette, and Erie Daily Times. Copies of the actual hearing notices are provided in Appendix B-1 (relating to public hearing notices) of this Plan. In addition, the Department also provided notice of the date, time and location of each public hearing to EPA, local air pollution control agencies and any state in the interstate region whose air quality may be affected by emissions from existing designated EGUs. The notice also specified that copies of the proposed Section 111(d) State Plan were available for review in each of the Department's Regional Offices described in 25 Pa. Code § 121.4 (relating to regional organization of the Department).

The Department also certifies that the public hearings were held in accordance with the criteria specified in 40 CFR § 60.23(d). The public hearing certification is attached hereto as Appendix B-2 (relating to public hearing certification).

Interested persons were invited to submit written comments on the proposed State Plan to the Department by the close of business on September 8, 2006. In addition to testimony received at the public hearings, written comments were submitted by Senator Mary Jo White, Chairman, Senate Environmental Resource & Energy Committee; Eric J. Epstein, Chairman, Three Mile Island Alert; Melody Zullinger, Executive Director, Pennsylvania Federation of Sportsmen's Clubs; Gene Barr, Vice President, Political and Regulatory Affairs, Pennsylvania Chamber of Business and Industry; Nathan Wilcox, Energy and Clean Air Advocate, Penn Environment; Robert J. Barkanic, Environmental Director, PPL Services Corporation; Judith M. Katz, Director, Air Protection Division, U.S. EPA Region III, Philadelphia; Suzanne Seppi, Project Manager, Group Against Smog and Pollution Inc.; Joseph Otis Minott, Clean Air Council; Alisha Deen-Steindler, Eastern Pennsylvania Director, Clean Water Action; and Douglas L. Biden, President,

Electric Power Generation Association. The Department has prepared a Comment and Response Document, which addresses the comments received during the public participation process. The Comment and Response document is attached hereto as Appendix B-3 (relating to comment and response document on section 111(d) State Plan for existing designated EGUs).

III. IMPLEMENTATION OF THE SECTION 111(d) STATE PLAN

The Department has developed a final-form regulation to control mercury emissions from existing designated coal-fired EGUs as specified at 25 Pa. Code §§ 123.201-123.215. On October 17, 2006, the Pennsylvania's Environmental Quality Board (EQB) has approved the final-form rulemaking to reduce mercury emissions from existing designated coal-fired EGUs. [See revised Appendix C (relating to mercury final rulemaking-25 Pa.Code, Chapter 123, standards of contaminants)]. Owners and operators of coal-fired EGUs in Pennsylvania must demonstrate to the Department that each EGU meets the requirements of 25 Pa. Code §§ 123.201-123.215. The requirements in 25 Pa. Code §§ 123.201-123.215 will, except as noted, supercede the New Source Performance Standard requirements and Guidelines adopted in their entirety and incorporated by reference in 25 Pa. Code § 122.3 (relating to adoption of standards). The annual emission limitations for coal-fired EGUs are specified in § 123.207 (relating to annual emission limitations for coal-fired EGUs). The owners and operators of EGUs subject to the State Plan must comply with the final rulemaking regardless of whether plan approvals or operating permits are revised to incorporate the requirements included in the Plan.

IV. ANNUAL EMISSION LIMITATIONS AND NON-TRADABLE MERCURY ALLOWANCES FOR COAL-FIRED ELECTRIC GENERATING UNITS

The owner or operator of an existing EGU must comply with the annual emission limitations established under the statewide non-tradable mercury allowance program specified in 25 Pa. Code § 123.207(b)(1) and (2) and described herein.

Emission Limitation Set-asides. The total tons of mercury emissions available for emission limitation set-asides as annual non-tradable mercury allowances in the statewide mercury nontradable allowance program are:

- (a) 1.779 tons (56,928 ounces) of mercury emissions for Phase 1, effective January 1, 2010 through December 31, 2014.
- (b) 0.702 tons (22,464 ounces) of mercury emissions for Phase 2, effective January 1, 2015, and each subsequent year.

The final-form mercury regulation establishes a separate new EGU set-aside for the Phase 1 control period of 5 percent of the annual non-tradable mercury allowances established in \$127.207 (c)(1)(i) for the years beginning January 1, 2010, through December 31, 2014. In accordance with \$127.207 (c)(1)(ii), a 3 percent new unit set-aside is established for the Phase 2 control period, beginning January 1, 2015 and each year thereafter.

The maximum number of annual nontradable mercury allowances set aside for the owner or operator of each existing Circulating Fluidized Bed (CFB) EGU in accordance with § 123.207(d) shall be determined by multiplying the affected CFB's baseline heat input fraction of the State's total baseline annual heat input for all EGUs subject to the Phase 2 annual mercury allowance set-aside for existing EGUs in this Commonwealth, as follows:

- (1) The baseline heat input in million British thermal units (MMBtu) for each existing designated CFB will be the average of the three highest annual heat inputs using the heat input data for the CFB from EPA's Acid Rain Database and the Department's database for the calendar years 2000 through 2004.
- (2) The State's annual mercury allowance set-aside for existing EGUs for Phase 2 is 21,790 ounces.

For each designated EGU, other than CFBs, for each calendar year beginning January 1, 2010, the Department will set aside for the owners and operators of existing EGUs, other than CFBs, a total number of annual nontradable mercury allowances from the total ounces of mercury emissions available for annual emission limitation set-asides in Phases 1 and 2 of the Statewide mercury allowance program established in § 123.207 (b).

The maximum number of annual nontradable mercury allowances set aside for the owner or operator of each existing EGU, other than CFBs, in accordance with § 123.207(f) must be determined for the existing EGU, other than CFBs, by multiplying its baseline heat input fraction of the State's total baseline annual heat input for all EGUs by the Department's annual mercury allowance set-aside for existing affected EGUs in each phase, as follows:

- (1) The baseline heat input in MMBtu for each existing EGU, other than CFBs, will be the average of the three highest amounts of annual heat input using the heat input data for the EGU, other than CFBs, from EPA's Acid Rain Database and the Department's database for calendar years 2000 through 2004.
 - (2) The State's annual mercury allowance set-aside for existing affected EGUs is:
 - (i) 54,080 ounces for Phase 1.
 - (ii) 21,790 ounces for Phase 2.

By May 31, 2008, the Department will publish for comment in the *Pennsylvania Bulletin* the maximum number of annual nontradable mercury allowances set aside for the owner or operator of each existing CFB and EGU, other than CFBs, for Phase 1 of the Statewide mercury allowance program. The nontradable mercury allowances must only be used to demonstrate compliance with the annual emission limitation requirements established in accordance with the Pennsylvania-specific mercury regulation.

By May 31, 2013, the Department will publish for comment in the *Pennsylvania Bulletin* the maximum number of annual nontradable mercury allowances set aside for the owner or operator of each existing affected CFB and EGU, other than CFBs, for Phase 2 of the Statewide mercury allowance program. The nontradable mercury allowances must only be used to demonstrate compliance with the annual emission limitation requirements.

By March 31 of the year following each reporting year, the Department will notify the owner or operator of each existing EGU, Facility, or System, in writing, of the actual number of annual nontradable mercury allowances awarded to the owner or operator of the EGU, Facility, or System for the control period.

- (1) The actual number of annual nontradable mercury allowances awarded to the owner or operator of the EGU, Facility, or System will be based on the actual emissions reported to the Department in accordance with §§ 123.210-123.215.
- (2) If the actual emissions of mercury reported to the Department in accordance with §§ 123.210-123.215 are less than the maximum number of annual nontradable mercury allowances set aside in the Statewide mercury allowance program for the owner or operator of an EGU, Facility, or System in accordance with the requirements of either § 123.207 (c), (d) or (f), the Department will place the unused portion of annual nontradable mercury allowances in the annual emission limitation supplement pool established under § 123.208 (relating to annual emission limitation supplement pool).
- (3) The unused portion of annual nontradable mercury allowances set aside under § 123.207 (c), (d) or (f) may not be added to the maximum number of annual nontradable mercury allowances set aside for the owner or operator of the affected EGU, Facility, or System for subsequent years. The annual nontradable mercury allowances may not be banked for use in future years.
- (4) The actual number of annual nontradable mercury allowances awarded to the owner or operator of the EGU, Facility, or System may not exceed the maximum number of annual nontradable mercury allowances set aside for the owner or operator of the EGU, Facility, or System in the Statewide mercury allowance program in accordance with subsection (c), (d) or (f) except as provided in § 123.209 (relating to petition process).
- (5) Each ounce of mercury emitted in excess of the maximum number of annual nontradable mercury allowances set aside for the owner or operator of the affected EGU, Facility, or System in accordance with subsection (c), (d) or (f) shall constitute a violation of this section and the act, except as provided under § 123.209.
- (6) Section 123.209 of the Pennsylvania-specific mercury regulation establishes a petition process whereby an owner or operator may request additional allowances from the Department's annual emission supplement pool established under § 123.208. If the Department grants such a request, the additional allowances granted for an EGU, Facility or System must not exceed the mercury budget established under CAMR for Pennsylvania.

V. INVENTORY OF DESIGNATED EXISTING COAL-FIRED ELECTRIC STEAM GENERATING UNITS

In accordance with 40 CFR § 60.25(a), the State Plan must include "an inventory of all designated facilities including emissions data for the designated pollutant." In the Commonwealth of Pennsylvania, the Department's final-form regulation applies to seventy-three (73) existing designated coal-fired EGUs presently operating at thirty-five (35) facility locations

including EGUs located in Allegheny County that are subject to these applicable requirements. The inventory of the existing designated coal-fired EGUs is presented in Table 1. Should other EGUs be discovered subsequent to the submittal of this State Plan to EPA, there will be no need to reopen this State Plan. The owners or operators of existing EGUs must comply with the requirements of 25 Pa. Code §§ 123.210-123.215 regardless of whether the EGU is identified in the source inventory for the Plan.

Table 1: Inventory of Existing Designated Coal-fired Electric Steam Generating Units in Pennsylvania including Allegheny County

PERMIT NUMBER	FACILITY NAME	UNIT ID	Capacity MW	FACILITY ADDRESS					
Coal-Fired	EGUs Other Than CFBs								
		2	32						
04-00446	AES Beaver Valley LLC	3	107	394 Frankfort Road, Monaca, PA 15061-2254					
04-00440	ALS Beaver valley LLC	4	55	574 Frankfort Road, Wollaca, FA 15001-2254					
		5	28						
03-00023	Armstrong Power Station	1	172	281 RR 1 Clay Road, State Route 4006, Adrian, PA 16210					
03-00023	Armstrong rower Station	2	171						
		1	781						
04-00235	Bruce Mansfield Power Plant	2	785	SR 168 S, Shipping port, PA 15077					
		3	805						
		1	321						
67-05005	Brunner Island Steam Electric	2	378	Brunner Island, York Haven, PA 17370					
	Station	3	735						
95-0054	Cheswick Power Plant	1	562	Pittsburgh and Porter Street, Springdale, PA 15144					
32-00059	Conemaugh	1	850	1442 Power Road, New Florence, PA 15944					
	-	2	850	· ·					
15-00019	Cromby	1	144	Township Line Cromby Road, Phoenixville, PA 19460					
23-00017	Eddystone	1	279	1 Industrial HWY, Eddystone, PA 19022-1524					
		2	302	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
		1	97						
63-00014	Elrama	2	97	30 Duquesne Light HWY, Elrama, PA 15038					
		3	109						
		4	171						
		1	500	2907 E. Roy Furman HWY, Masontown, PA 15461-					
30-00099	Hatfields Ferry	2	500	2591					
~		3	500						
Coal-Fired	EGUs Other Than CFBs	7	ı						
		1	620						
32-00055	Homer City	2	614	1750A Power Plant Road, Homer City, PA 15748-8009					
		3	650						
40-00005	Hunlock Power Station	6	48	Route 11, Hunlock Creek, PA 18621					
03-00027	Keystone	1	850	317 Keystone Lane, Shelocta, PA 15774-2305					
		2	850						
48-00041	Martins Creek*	1	140	Foul Rift Road, Martins Creek, PA 18063					
		2	140	, ,					
63-00016	Mitchell	33	275	50 Electric Way, New Eagle, PA 15067					

PERMIT NUMBER	FACILITY NAME	UNIT ID	Capacity MW	FACILITY ADDRESS
47-00001	Montour	1	760	18 McMichael Road, Washington, PA 17884
47 00001	Wiontour	2	745	To Welvinehael Road, Washington, 171 17004
		3	98	
37-00023	New Castle	4	98	Route 168 S, West Pittsburgh, PA 16160
		5	137	
48-00006	Portland	1	158	River Road, Portland, PA 18351
		2	243	
		1 2	122	
17-00001	Shawville	3	125 175	SR 0970, Snowville, PA 16873
		4	175	
		3	83	
		4	128	
~~ 00001	~ .	1A	38	
55-00001	Sunbury	1B	38	Old Trail Road, Shamokin Dam, PA 17876
		2A	38	
		2B	38	
		1	81	
06-05024	Titus	2	79	296 Poplar Neck Road, Birdsboro, PA 19508-8144
		3	81	
Coal Refu	se - Fired CFB Units			
11 00222	G 1: G ::	1	87	242 P. 1: 1 P. 1 F. 1 P. 15021 4500
11-00332	Cambria Cogeneration	2	87	243 Rubisch Road, Edensburg, PA 15931-4500
11-00378	Colver Power Project	AAB01	116	141 Inter Power Dr., Colver, PA 15927-4207
11-00318	Ebensburg Power Co.	031	51	Cambria County Industrial Part, Revloc, PA 15948
49-00001	Foster Wheeler Mt. Carmel	SG-101	40	Marion Heights Road, Marion Heights, PA 17832
54-00004	Gilberton Power Co.	031	50	50 Eleanor Dr, Frackville, PA 17931-2301
		032	50	
	Northampton Generating Plant		110	1 Horwith Dr., Northampton, PA 18067-9728
54-00008	Northeastern Power Co.	031	51	Route 309, McAdoo, PA 18237
13-00003	Panther Creek Energy Facility	2	57	4 Dennison Road, Nesquehoning, PA 18240-2242
		_	57	
16-127B	Piney Creek Power Plant	031	30 57	428 Power LN, Clarion, PA 16214-3128
61-00181	Scrubgrass Generating Plant	2	57	2151 Lisbon Road, Kinnerdell, PA 16374-3305
		12R	0	
		14R 62		
32-00040	Seward	15R	156	595 Plant Road, New Florence, PA 15944
			253	
		2	253	
	St. Nicholas Cog. Project	1	166	200 Mahantongo Street, Pottsville, PA 17901-3095
54-00006	Westwood	031	30	US Route 209, Tremont, PA 17981
54-00005	Wheelabrator - Frackville	GEN1	52	475 Morea Road, Frackville, PA 17931-2340

^{* =} EGUs at this facility will be shutdown in September 2007

R = Retired

An inventory of mercury emissions for the EGUs is provided in Table 2. The 1999 data represents the data collected by the EPA during its Information Collection Request. The data reported to the Toxic Release Inventory data was accessed on June 13, 2006 and represents the reported "Total On-site Air Emissions." The owners or operators of each EGU report emissions data on an annual basis to the Department or appropriate local agency. Table 2 contains the data reported to the Department's Air Information Management System. Data for the Cheswick facility was reported to the Allegheny County Health Department and is included in this table.

Table 2.
Mercury Emissions Data
Coal-Fired Electric Generating Units in Pennsylvania

		1999	2000	2000	2001	2001	2002	2002	2003	2003	2004	2004
Facility	County	FPA lh/Voor				AIMS lb/Vear	TRI lh/Voor	AIMS lb/Voor		AIMS lb/Year		AIMS lh/Voor
AES BEAVER	County	El A lb/ I cal	TKI ID/ T Car	Alivis ib/ I car	TKI ID/ T car	Alvis ib/ I car	TKI 10/ Tcar	Alivio ib/ I cai	TKI ID/ TCal	Alivis ib/ I car	TKI 10/ Tcar	Alivis ib/ I cai
	BEAVER	29.9429	87		46		45	180	42	44	42	44
ALLEGHENY												
ENERGY INC												
ARMSTRONG												
POWER STATION	ARMSTRONG	306.7248	290		260		246.7	254	247	257	258	258
ALLEGHENY												
ENERGY INC HATFIELD												
POWER STATION	CDEENE	413.9726	581		681		420.6	1129.4	169.8	980	515.91	518
ALLEGHENY	OKLLIVE	413.7720	361		001		420.0	1127.4	107.0	760	313.71	316
ENERGY INC												
MITCHELL												
POWER STATION	WASHINGTON	30.3098	60		54		44.1	107	55.8	132	53.4	54.2
CAMBRIA COGEN												
CO	CAMBRIA	69.979	13.741		14		14		8.4		4.59	
CHESWICK												
	ALLEGHENY	237.2168	205		236.94		186.76	185.4	236.09	240	199.7	200
COLVER POWER							_		_			
	CAMBRIA	69.1795	6		8		7	8	1	7	0.7	1
CONECTIV												
BETHLEHEM PLANT	NORTHAMPTON						0		10.9	2.4	0	2.4
EBENSBURG	NORTHANII TON						0		10.9	2.4	0	2.4
	CAMBRIA	0.5545	31		28	27.6	26	20	7.47		0.177	
EME HOMER												
CITY												
GENERATION L P	INDIANA	1852.0735	1389.25				545	544	664.67	664	658.19	650
EXELON CORP												
CROMBY												
GENERATING	CVIDATED.	4.500					20.0			400.0		
	CHESTER	1.7226	45.1		50.1	2.4	30.8	60.2	0	100.2	44.6	80
EXELON CORP. CROYDON												
GENERATING												
	BUCKS		1.6		1.2		2.1		38.6		0	
EXELON CORP.	20010		1.0		1.2		2.1		30.0		- 0	
EDDYSTONE												
GENERATING												
STATION	DELAWARE	44.616	153.1		192.9	1.2	106.4	0.4	181.4	540	161.9	520

Table 2. Mercury Emissions Data Coal-Fired Electric Generating Units in Pennsylvania

	I			<u> </u>		ng Omts n		. ,				
		1999	2000	2000	2001	2001	2002	2002	2003	2003	2004	2004
Facility	County	EPA lb/Year	TRI lb/Year	AIMS lb/Year								
GILBERTON	·											
POWER CO	SCHUYLKILL	0.6249	1		0.003		0.08		0.03		0.01	
HUNLOCK												
CREEK ENERGY												
VENTURES												
(HUNLOCK												
POWER STATION)	LUZERNE	51.6019	59		40		39		23		80.23	80.2
MONTOUR												
STEAM												
ELECTRIC												
STATION	MONTOUR	1218.5431	277		269		277	260	296	290	285	280
MOUNT CARMEL			.=									
	NORTHUMBERLAND	0.3636	47.568		333	334	327	320	0.6	400	0.6	200
NEW CASTLE												
POWER PLANT	LAWRENCE	208.6346	254		280.1		240.07	241	200.06	206	220.12	220
NORTHEASTERN			_						_		_	
POWER CO	SCHUYLKILL	0.4608	1		1		1.3		1		1	
PANTHER CREEK	G. DDON	0.4500	_		0.50		0.52	40	0.5	40	0.4	
	CARBON	0.4682	I		0.59		0.62	40	0.6	40	0.4	
PENNSYLVANIA												
POWER CO.												
BRUCE MANSFIELD												
POWER PLANT	BEAVER	1007.9355	1000		890		790	1060	783	800	955.02	916.2
PG&E INTL	DEAVER	1007.9333	1000		890		790	1000	/63	800	933.02	910.2
ENERGY GROUP												
NORTHAMPTON												
GENERATING												
PLANT	NORTHAMPTON	0.9662	18		14		13.4		4.1		4.1	
PINEY CREEK												
LTD PTNR	CLARION	0.1811	4		0		0		0.83		0.00041	
PPL BRUNNER									0.00			
ISLAND STEAM												
ELECTRIC												
STATION	YORK	436.3887	270		198		298	228	272	268	314	320
PPL MARTINS												
CREEK STEAM												
ELECTRIC												
	NORTHAMPTON	52.0678	51		49	12.4	50	49	49	54	48	53.2
RELIANT												
ENERGY												
CONEMAUGH												
POWER PLANT	INDIANA	494.5771	1101		500.2		496.1	500	540.6	520	500.2	520

Table 2. Mercury Emissions Data Coal-Fired Electric Generating Units in Pennsylvania

		1999	2000	2000	2001	2001	2002	2002	2003	2003	2004	2004
Facility	County	EPA lb/Year	TRI lb/Year	AIMS lb/Year								
RELIANT ENERGY INC						-						12 111 111
ELRAMA POWER PLANT	WASHINGTON	57.9983	60		66.86		60.85	67	60.6	56	56.82	60
RELIANT ENERGY KEYSTONE												
POWER PLANT	ARMSTRONG	1851.5024	1401		1290.2		1235.2	1235	1280.1	1260	1258.3	1260
RELIANT ENERGY PORTLAND POWER PLANT	NORTHAMPTON	131.5511	230		76.2		115.1	114	112	110	123	122.8
RELIANT ENERGY SEWARD POWER	NORTH MIN TON	131.3311	230		70.2		113.1	114	112	110	123	122.0
	INDIANA	52.6677	100		175		156.1	156.6	132.1	131.2	3.09	
RELIANT ENERGY SHAWVILLE												
	CLEARFIELD	927.9341	400	944.2	627.4	626.8	631.6	630.6	700.5	688	646.2	645.4
RELIANT ENERGY TITUS POWER PLANT	BERKS	76.4363	170		57.3		72.1	72	81.5	80	74.4	74.4
RELIANT ENERGY WARREN STATION	WARREN		24		40.3		34.5		0		0	
SAINT NICHOLAS COGENERATION					40.3						U	
SCRUBGRASS	SCHUYLKILL	0.635					0)	10		5	
GENERATING PLANT	VENANGO	0.8538	2.4		2.201		2.401		2.201		2.201	
SUNBURY GENERATION												
	SNYDER	236.1909	295.3	120	256.9		308.8	280	240	238.4	100	101.6
WHEELABRATOR FRACKVILLE ENERGY CO INC	SCHUYLKILL	0.3905	0.36		0.009		0.003		0		0	
WPS WESTWOOD GENERATION							a					
	SCHUYLKILL		7.1		27.1		37.1				34	
Total		9,865.3	8,637.5	1,064.2	6,766.5	1,004.4	6,860.8	7,781.6	6,489.0	8,148.2	6,650.9	7,198.6

VI. COMPLIANCE SCHEDULE FOR COAL-FIRED EGUS [40 CFR § 60.24(a)]

Pursuant to 40 CFR § 60.25(h)(3), the State Plan must contain emission standards and compliance schedules, which demonstrate that compliance with the mercury budget for the appropriate time periods. 70 FR 28649 (May 18, 2005). Consequently, the owner or operator of each existing designated coal-fired EGU in Pennsylvania must achieve compliance with the Phase 1 (the period from January 1, 2010 through December 31, 2014) and Phase 2 (the period from January 1, 2015, and each subsequent year thereafter) annual mercury emission limitations established by the Department and emission standards set forth in 25 Pa. Code § 123.205 (relating to emission standards for coal-fired EGUs).

In addition to demonstrating compliance with the emission standards, the owner or operator of one or more coal-fired EGUs subject to the annual emission limitations may demonstrate compliance on a unit-by-unit basis, facility-wide emission averaging or a system-wide compliance demonstration in accordance with 25 Pa. Code § 123.207. The owners or operators of designated EGUs shall comply with all applicable requirements of the final-form mercury regulation and demonstrate compliance with the annual emission limitations of this regulation by March 1 each year for the preceding control period.

VII. RECORDKEEPING, REPORTING AND MONITORING REQUIREMENTS [40 CFR § 60.25]

(a) General Monitoring and Reporting Requirements

Pursuant to 40 CFR § 60.25, the Section 111(d) State Plan must provide for the monitoring of the status of compliance with the mercury emission standards and annual mercury emission limitations. Owners and operators, and to the extent applicable, the mercury-designated representative for the designated EGUs must demonstrate compliance with monitoring, recordkeeping and reporting requirements of 25 Pa. Code §§ 123.210-123.215 and, § 139.101 (relating to general requirements), 40 CFR Part 75, Subpart I and the provisions in 40 CFR §§ 60.4110--60.4114 (relating to authorization and responsibilities of mercury designated representative.)

(b) Certification Procedures for Emissions Monitoring

The owner or operator of an existing designated EGU shall comply with the initial certification and recertification procedures for a continuous emission monitoring system (CEMS) as specified under 40 CFR § 75.20 and § 123.211 and an excepted monitoring system (sorbent trap monitoring system) as required under 40 CFR § 75.15 and § 123.210 and Chapter 139, Subchapter C (relating to the requirements for source monitoring for stationary sources). The owner or operator of an EGU that qualifies for and in instances where the EGU owner or operator elects to use the low mass emissions excepted methodology under 40 CFR § 75.81(b) shall meet the applicable certification and recertification requirements in 40 CFR §§ 75.81(c) through (f).

(c) Recordkeeping and Reporting Requirements

The owner or operator of an existing EGU and its designated representative shall comply with all recordkeeping and reporting requirements as specified under 40 CFR § 75.84 and 25 Pa. Code §§ 123.210-123.215 and Chapter 139, Subchapter C (relating to the requirements for source monitoring for stationary sources). In addition, the mercury-designated representative for a mercury budget unit shall notify the applicable permitting authority in accordance with 40 CFR § 75.61.

(d) Additional Requirements

In addition to annual mercury emission limitation requirements, the owner and operator of each designated EGU in Pennsylvania must comply with the emissions standards requirements set forth in 25 Pa. Code § 123.205. In accordance with § 123.206 (relating to compliance requirements for the emission standards for coal-fired EGUs), the owner and operator of each EGU shall demonstrate compliance with the emission standards by complying on a unit-by-unit basis or by facility-wide emissions averaging.

The owner or operator of an EGU that monitors and reports mercury mass emissions using a mercury concentration monitoring system and flow monitoring system shall monitor and report heat input rate at the unit level using procedures set forth in 40 CFR Part 75. If a mass emissions monitoring system fails to meet a quality assurance or quality control requirement, mass emissions data shall be substituted using the missing data procedures in 40 CFR Part 75, Subpart I and 25 Pa. Code § 123.212 of the Department's final-form regulation. The owner or operator of an EGU complying with the requirements of the Pennsylvania-specific regulation shall comply with the coal sampling and analysis requirements of § 123.214 for purposes of demonstrating compliance with the mercury emission limitations of § 123.207.

The EGU owner or operator or mercury designated representative for an EGU may submit a petition to EPA requesting approval to use of an alternative monitoring system, alternative reference method or any other alternative to any requirement of 40 CFR Part 75. EPA will approve the alternative in writing in accordance with 40 CFR Part 75, Subpart E (relating to alternative monitoring system).

VIII. LEGAL AUTHORITY TO IMPLEMENT THE STATE PLAN [40 CFR § 60.26(a)]

Pursuant to 40 CFR § 60.26(a), the Section 111(d) State Plan for existing EGUs must include a demonstration that the state has sufficient legal authority to implement the provisions of the state plan. Appendix D (relating to legal authority to implement the State Plan) includes a legal opinion that demonstrates that the Department has sufficient statutory and regulatory authority under its plan approval, State operating permits and Title V permit programs to implement and enforce the applicable requirements adopted under Section 111(d) of the Clean Air Act, including those for existing coal-fired EGUs.

The Air Pollution Control Act (APCA) and the regulations promulgated thereunder provide adequate authority for the Department to enforce the Guidelines requirements developed pursuant to Sections 111(d) of the Clean Air Act. Section 6.1(k) of the APCA provides that the Department shall require revisions to any permit to incorporate applicable standards and regulations promulgated under the Clean Air Act after the issuance of a Title V permit. 35 P S. § 4006.1(k). [See Appendix E (relating to PA Air Pollution Control Act, and Applicable Permitting Regulations)].

Section 127.463(e) of Title 25 also states that: "Regardless of whether a revision is required under this section, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by the standards or regulations." Subsection (e) expressly authorizes PADEP to require compliance with applicable requirements prior to the issuance of State operating permits or Title V permits to designated facilities. Failure to comply with the Guidelines requirements subjects the owners or operators of designated facilities to appropriate enforcement action including the issuance of departmental orders and the assessment of civil penalties. 35 P. S. §§ 4004(9)(i), 4009.1 and 4010.1.

Section 9.1 of the APCA provides that the Department may assess up to \$25,000 per day in civil penalties for violations of the act, regulations adopted under the act, departmental orders or terms and conditions of plan approvals and operating permits. 35 P. S. § 4009.1.

The provisions described above provide sufficient authority to enforce applicable requirements prior to the renewal of state operating permits or Title V permits. Additionally, Section 7.1 of the APCA authorizes the Department 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. 35 P. S. § 4007.1. If the permittee fails to comply with the Guidelines, the Department may withhold plan approvals or operating permits until the owner or operator of a designated facility corrects violations of applicable requirements, including Sections 111(d) of the Clean Air Act.

A copy of the Commonwealth's Air Pollution Control Act (35 P. S. § 4001 et seq.) (See Appendix E-1) and applicable regulations in 25 Pa. Code Article III (relating to air resources) (See Appendix E-2) is included in this submittal in accordance with 40 CFR § 60.26(b).