

Regulatory Analysis Form

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(1) Agency

Environmental Protection

(2) I.D. Number (Governor's Office Use)

7-405

IRRC Number:

2547

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INDEPENDENT REGULATORY
REVIEW COMMISSION

(3) Short Title

Mercury Emission Reduction Requirements for Electric Generating Units

(4) PA Code Cite

25 Pa. Code Chapter 123

(5) Agency Contacts & Telephone Numbers

Primary Contact: Marge Hughes, 783-8727

Secondary Contact: Patrick McDonnell, 783-8727

(6) Type of Rulemaking (Check One)

- Proposed Rulemaking
 Final Order Adopting Regulation
 Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification Attached?

- No
 Yes: By the Attorney General
 Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

The final-form regulation will achieve reduced mercury emissions from coal-fired electric generating units (EGUs). The final rulemaking establishes mercury emission standards, annual emission limitations, a nontradable allowance program and a petition process for supplemental allowances. The final form regulation also includes definitions and other provisions including monitoring, recordkeeping and reporting requirements.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

This action is being taken under the authority of section 5(a)(1) of the Air Pollution Control Act (35 P.S. §4005(a)(1)), which grants to the Board the authority to adopt regulations for the prevention, control, reduction, and abatement of air pollution.

(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

On May 18, 2005, EPA promulgated its "Clean Air Mercury Rule" ("CAMR"), which established a cap-and-trade program under Section 111 of the Clean Air Act (CAA) to regulate mercury emissions from coal-fired EGU, starting in January 2010.

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(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action. (Continued)

By November 17, 2006, a Section 111(d) State Plan for the implementation of CAMR or a more protective program must be submitted to EPA Region III. If a State fails to submit a State plan, EPA will promulgate a Federal plan under Section 111(d)(2)(A) of the CAA. EPA is expected to propose the CAMR as the "model rule" for the Federal Plan. Consistent with CAA requirements, EPA has indicated that states are free to develop more stringent mercury control programs. The final-form regulation will be submitted to EPA as the State Plan to fulfill Pennsylvania's requirements under CAMR

11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

This final-form regulation will reduce emissions of mercury from EGUs within the Commonwealth and will reduce the deposition of mercury to the land and waters of the Commonwealth. Mercury is a dangerous reproductive and neurological toxicant. It can affect the brain, spinal cord, kidneys and liver.

Mercury exposure in humans is primarily the result of consumption of fish and seafood. Accumulation of mercury in aquatic ecosystems has resulted in 45 states, including Pennsylvania, issuing fish consumption advisories. Pennsylvania has fish consumption advisories for mercury in 80 water bodies including the Delaware, Ohio, Potomac, and Susquehanna River Basins and the Lake Erie Basin.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

Mercury is a highly toxic pollutant – one specifically targeted by Congress when it amended Section 112 of the federal Clean Air Act ("CAA") in 1990. 42 U.S.C. §7412. Mercury is a dangerous reproductive and neurological toxin. It can affect the brain, spinal cord, kidneys and liver. Exposure to high levels of mercury can affect the ability to feel, see and taste and has the potential to limit mobility. Women of childbearing age and pregnant women are of special concern in terms of methylmercury exposure. Methylmercury exposure prior to pregnancy can actually place the developing fetus at risk because methylmercury persists in body tissue and is only slowly excreted from the body. Low-dose prenatal methylmercury exposure has been associated with poor performance on neurobehavioral tests in children, including those tests that measure attention, visual spatial ability, verbal memory, language ability, fine motor skills, and intelligence. According to EPA, "blood mercury analyses in the 1999-2000 National Health and Nutrition Examination Survey (1999-2000 NHANES) in 16-to-49 year old women showed that approximately 8% of women in the survey had blood mercury concentrations greater than 5.8 ug/L (which is a blood mercury level equivalent to the current RfD). "Based on this prevalence for the overall U.S. population of women of reproductive age and the number of U.S. births each year, it is estimated that more than 300,000 newborns each year may have increased risk of learning disabilities associated with in utero exposure to methylmercury." An updated NHANES report for 1999-2002 found that "approximately 6% of childbearing-aged women had levels at or above a reference dose, an estimated level assumed to be without appreciable harm (>5.8 µg/L)..." It should be noted that the NHANES is a "continuous survey of the health and nutritional status of the civilian, noninstitutionalized U.S. population"...that is updated in two-year cycles.

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(12) State the public health, safety, environmental or general welfare risks associated with non-regulation. (Continued)

The Northeast States for Coordinated Air Use Management ("NESCAUM") sponsored a report analyzing the cost savings and public health benefits of controlling mercury emissions from power plants. NESCAUM, *Economic Valuation of Human Health Benefits of Controlling Mercury Emissions from U.S. Coal-fired Power Plants*, (Feb. 2005) ("Harvard Study" or "Study"). The Study was prepared by the Harvard Center for Risk Analysis, funded by the EPA, co-authored by an EPA scientist, peer-reviewed by two other EPA scientists. The Harvard Study reveals that EPA miscalculated the "nature of the risk involved" by underestimating the public health benefits of reducing mercury. Specifically, the Harvard Study indicates that the public benefit of reducing power plant mercury emissions to 15 tons per year ranges from \$119 million annually (if only persistent IQ deficits from fetal exposures to methylmercury are counted) to as much as \$5.2 billion annually (if IQ deficits, cardiovascular effects, and premature mortality are all counted).

The May 2005 edition of *Environmental Health Perspectives* indicates that EPA underestimated the health benefits to be gained from reducing mercury. In one study, scientists from the Mount Sinai School of Medicine examined national blood mercury prevalence data from the Centers for Disease Control and Prevention and found that between 316,588 and 637,233 children each year have cord blood mercury levels greater than 5.8 micrograms per liter - the level associated with loss of IQ. See Leonardo Trasande, et al., *Public Health and Economic Consequences of Methylmercury Toxicity to the Developing Brain*, 113 *Environmental Health Perspectives*, No. 5 (May 2005). They estimated that the resulting loss of intelligence and diminished economic activity amounted to \$8.7 billion annually, with \$1.3 billion each year being directly attributable to mercury emissions from power plants. The scientists further caution that these costs will recur each year with each new birth cohort as long as mercury emissions are not controlled.

Impacts related to mercury deposition were studied at the Bruce Mansfield coal-fired power plant in Shippingport, Pennsylvania. Sullivan, T.M., et al., *Assessing the Mercury Health Risks Associated with Coal-Fired Power Plants: Impacts of Local Depositions*, Brookhaven National Laboratory, Upton, NY. This plant is characterized by high total mercury emissions. From the deposition modeling, the average increase in deposition as compared to a background deposition rate of 20 $\mu\text{g}/\text{m}^2/\text{yr}$ over a 2,500 km^2 around the plant was 15 percent at Bruce Mansfield. Over an area that is 50 – 100 km^2 , immediately adjacent to the plant, deposition doubled at the Bruce Mansfield plant. The report concluded that if the plant emissions double local deposition, the fish concentration would be similarly doubled. As a result, the U.S. mean fish mercury content is 0.21 ppm and near the Bruce Mansfield plant the mean fish mercury content is 0.41 ppm.

The 2003 results of the EPA Office of Water study *Draft Mercury REMSAD Deposition Modeling Results* reinforce Pennsylvania's concern. This Regulatory Modeling System for Aerosols and Deposition modeling shows that, at mercury hot spots, local emission sources within a state can be the dominant source of deposition. At hot spots, local sources within a state commonly account for 50 percent to 80 percent of the mercury deposition. In-state sources contribute more than 50 percent of the pollution to sites in the top eight worst hot spot states, which are Michigan, Maryland, Florida, Illinois, South Carolina, North Carolina, Pennsylvania, and Texas, respectively.

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(12) State the public health, safety, environmental or general welfare risks associated with non-regulation. (Continued)

In addition to these studies, on September 8, 2006, results from the Steubenville Mercury Deposition Source Apportionment Study were released. This study found that nearly 70 percent of the mercury in rain collected at an Ohio River Valley monitoring site originated from nearby coal-burning industrial plants.

Moreover, the state-specific final-form regulation is designed to maximize the co-benefit of mercury emission reduction achieved through the installation of pollutions controls, which are required for the compliance with CAIR program. Owners and operators of EGUs are not disadvantaged under this timeframe, and there should not be any reliability concerns for delivery of power over the electric grid.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

Actual reductions in mercury emissions are expected to lower the wet and dry deposition of mercury. This final-form regulation will result in improved air quality and health benefits for the residents of this Commonwealth by reducing exposure to mercury emissions. Reductions in mercury emissions from coal-fired power plants should result in reduced deposition of mercury to aquatic ecosystems and downwind areas. Methylmercury concentrations in certain fish including rock bass, smallmouth bass and largemouth, brown trout walleye should also be reduced. In addition, if fish consumption advisories are lifted, sport fishing and tourism in Pennsylvania will benefit.

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

The final rulemaking will apply to the owners and operators coal-fired of approximately 78 EGUs with a nameplate rated capacity of 25 megawatts or greater. These EGUs represent approximately 20,000 megawatts of electric generating capacity in Pennsylvania. In 2004, the units accounted for 78.5% of the 4.23 tons of mercury emitted to the atmosphere from stationary sources in Pennsylvania. Based on data reported to in the 2004 Toxic Release Inventory, mercury emissions reported from sources in this Commonwealth were second only to emissions reported from sources in Texas. The owners and operators of the units will be required to reduce mercury emissions by at least 90 percent by 2015. However, under the federal trading scheme, compliance could be delayed until at least 2026 according to EPA projections.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

The final-form regulation will affect the owners and operators of coal-fired power plants with a nameplate rated capacity of 25 megawatts or greater. Some of the affected EGUs include units at Bruce Mansfield (First Energy), Montour and Brunner Island (PPL Generation), Conemaugh, Keystone and Seward (Reliant Energy), Homer City (Edison Mission Energy), and Hatfield's Ferry (Allegheny Energy).

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(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

On August 9, 2004, Citizens for Pennsylvania's Future and nine other organizations filed a petition for rulemaking with the Environmental Quality Board (EQB). Since the original filing of the petition, an additional 39 organizations declared their intent to be co-petitioners. On August 16, 2005 the EQB accepted the Department's recommendation to move forward with a Pennsylvania-specific mercury rule with an expanded public involvement process. The Department established a Mercury Rule Workgroup as part of the expanded public involvement process for a Pennsylvania-specific mercury rule. The first Workgroup meeting, on October 14, 2005, included presentations regarding workgroup objectives, an overview of mercury, its fate and transport, and other states' regulations. The second meeting of the Workgroup, on October 28, 2005, focused on the health impacts of mercury. At the third meeting of the workgroup, on November 18, 2005, speakers discussed the health impacts of mercury and methods of controlling mercury emissions from coal-fired power plants. The last workgroup meeting was held on November 30, 2005 and focused on additional health impacts related to mercury; and, at that meeting, workgroup members, and others, discussed their organizations' proposals for the control of mercury. The final rulemaking regulatory concepts were discussed at a Joint Meeting of the Air Quality Technical Advisory Committee (AQTAC), the Citizens Advisory Council (CAC), and the Mercury Rule Workgroup on August 30, 2006. Concepts were discussed with the AQTAC on September 11, 2006, and on September 27, 2006, AQTAC recommended that the Department present the final-form regulation to the EQB for final rulemaking.

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

It is anticipated that the majority of EGU owners and operators in the Commonwealth will be able to comply with both phases of the final form regulation using existing wet flue gas desulfurization (WFGD) and selective catalytic reduction (SCR) technology. The use of these technologies will be required for many of the facilities in order to comply with the federal Clean Air Interstate Rule (CAIR). There are a number of currently available mercury-specific that the owners and operators of some EGUs may install to reduce emissions of mercury to the atmosphere. It is estimated that the cost increases for electricity resulting from these mercury control programs will be minor.

The regulations will, to some extent impact all EGUs in Pennsylvania. There will be compliance costs related to the construction and operation of air pollution control devices to control mercury, NO_x, and SO_x. For Phase 1 the total annualized cost (capital and operating) of mercury-specific control technology that EGUs must install beyond CAIR to comply with the Pennsylvania-specific mercury rule would be \$15.4 to \$15.8 million per year. The cost of \$0.0012/kwh represents the upper bound cost estimate for the EGUs to comply with the Phase 1 limits. The total cost of purchasing mercury allowances (at \$953 per ounce, according to a U.S. Department of Energy estimate) if EGUs did not do anything beyond CAIR in order to comply with CAMR would be \$15.7 million per year. As a result, the total cost of complying with Phase 1 of the Pennsylvania-specific mercury regulation would be no more than the cost of complying with CAMR.

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(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.
(Continued)

For Phase 2, the total annualized cost (capital and operating) of mercury-specific control technology that EGU owners and operators might opt to install beyond CAIR to comply with the Pennsylvania Mercury Rule would range from \$16.7 to \$53 million per year. The cost of \$0.0038/kwh represents the upper bound cost estimate for the EGUs to comply with the Phase 2 limits.

The estimated total cost of purchasing mercury allowances (using \$2,619 per ounce, according to a U.S. Department of Energy estimate) would be approximately \$28.3 million per year if EGU owners and operators did not implement additional measures beyond CAIR to comply with CAMR. At the low end of the cost estimate, the annualized cost of mercury specific technology may not be any more than the costs of purchasing the allowances. However, at the high end of the cost estimate, the additional cost above purchasing allowance would be around \$24.7 million. This would represent about \$0.0018/kwh.

The majority of the mercury reductions in Pennsylvania are anticipated to be achieved through the installation of CAIR controls for NO_x and SO_x, there will not exist the same incentive to utilize fuel switching to lower mercury content coal as there is under CAMR. A control strategy combining fuel switching and the purchase of mercury allowances is a viable option that many companies are expected to use to meet the CAMR requirements. The final-form regulation disallows this approach. Based on the data submitted in response to the Department's data request, fuel switching is not necessary to comply with its proposed emission standards and, to the contrary, the Pa-specific regulation does not provide incentives for fuel switching. Therefore, the continued use of the existing coal feedstocks should not be affected.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

Except for the anticipated slight increase in the cost of electricity, local governments should not be affected by this regulation.

To the extent that state government purchases electricity from an affected generating unit the costs will be commensurate with those the private sector will experience.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures, which may be required.

To the extent that state government purchases electricity from an affected EGU owner or operator, the costs will be commensurate with those incurred by the private sector.

Nominal costs will be incurred by the Commonwealth to assist in providing training, outreach and assistance to the regulated community. No new staff resources are anticipated to be necessary.

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(20) In the table below, provide an estimate of the fiscal savings and cost associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY (06/07) Year	FY +1 (07/08) Year	FY +2 (08/09) Year	FY +3 (09/10) Year	FY +4 (10/11) Year	FY +5 (11/12) Year
SAVINGS:	\$	\$	\$	\$ (Millions)	\$ (Millions)	\$ (Millions)
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Savings	0.00	0.00	0.00	0.00	0.00	0.00
COSTS:						
Regulated Community	0.00	0.00	0.00	7.9	15.8	15.8
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Costs	0.00	0.00	0.00	7.9	15.8	15.8
REVENUE LOSSES:						
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Revenue Losses	0.00	0.00	0.00	0.00	0.00	0.00

20a) Explain how the cost estimates listed above were derived.

For Phase 1 (2010-2014), the Department estimated that 16 units at 7 facilities might opt for mercury-specific control beyond the CAIR requirements. The total capital costs needed for brominated-ACI were estimated to be approximately \$4.9 to \$9.8 million. The annual operating costs were estimated to be approximately \$14.7 million. The total annualized costs for Phase 1 were estimated to be approximately \$15.4 to \$15.8 million. The mercury allowance costs are expected to be approximately \$15.7 million using DOE's projections of mercury allowance costs from 2010 through 2015.

For Phase 2 (2015 and each year thereafter), the Department estimated that 18 units at 7 facilities might opt for mercury specific control beyond the CAIR requirements. Some EGU owners and operators may choose to install COHPAC filter systems to comply with the Pennsylvania mercury rule. The capital costs for Phase 2 were determined by estimating the cost ranging from \$2/KW - \$125/KW of plant electrical generating capacity. The difference between the lower-bound and upper-bound costs estimates reflects the difference between carbon injection and the installation of COHPAC filter systems. The total capital costs for the installation of COHPAC are estimated to range from \$141.6 to \$313.3 million.

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(20a) Explain how the cost estimates listed above were derived. (Continued)

The total annualized cost (capital and operating) of mercury-specific control technology that EGU owners and operators might opt to install beyond CAIR to comply with the Pennsylvania Mercury Rule would range from \$16.7 to \$53 million per year. The cost of \$0.0038/kwh represents the upper bound cost estimate for the EGUs to comply with the Phase 2 limits.

The estimated total cost of purchasing mercury allowances (using \$2,619 per ounce, according to a U.S. Department of Energy estimate) would be approximately \$28.3 million per year if EGU owners and operators did not implement additional measures beyond CAIR to comply with CAMR. At the low end of the cost estimate, the annualized cost of mercury specific technology may not be any more than the costs of purchasing the allowances. However, at the high end of the cost estimate, the additional cost above purchasing allowance would be around \$24.7 million. This would represent about \$0.0018/kwh.

(20b) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY-3 (03/04)	FY-2 (04/05)	FY-1 (05/06)	Current FY (06/07)
Clean Air Fund – Major Emission Facilities	26,960,000	24,533,000	24,290,000	26,461,000

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

These emission reductions are necessary to reduce the exposure to mercury, a potent neurotoxin. The mercury emission reductions achieved by implementing this regulation will result in reduced exposure of all residents in Pennsylvania to levels of mercury that could adversely affect public health.

Scientists from the Mount Sinai School of Medicine examined National blood mercury prevalence data from the CDC and found that between 316,588 and 637,233 children each year have cord blood mercury levels greater than 5.8 micrograms per liter--the level associated with loss of IQ. See Leonardo Trasande, et al., Public Health and Economic Consequences of Methylmercury Toxicity to the Developing Brain, 113 *Environmental Health Perspectives*, No. 5 (May 2005). They estimated that the resulting loss of intelligence and diminished economic activity amounted to \$8.7 billion annually, with \$1.3 billion each year being directly attributable to mercury emissions from power plants. The scientists further caution that these costs will recur each year new birth cohort as long as mercury emissions are not controlled.

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(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

Non-regulatory options are not available.

Under the EPA "Clean Air Mercury Rule" ("CAMR"), states are required to submit a plan to EPA by November 17, 2006 to implement the CAMR requirements. Consistent with the requirements of the CAA, states may adopt more protective plans. If a State fails to submit a State Plan, as required under the CAMR, EPA will prescribe a Federal plan for that State, under Section 111(d)(2)(A) of the CAA. This final-form regulation, if adopted, will be submitted to EPA as the State Plan to fulfill Pennsylvania's requirements under CAMR.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

The Department determined that neither the approach adopted by the New Jersey Department of Environmental Protection (NJDEP), which was recommended by the petitioners to reduce mercury emissions from coal-fired power plants nor EPA's CAMR would be in the best interest of the Commonwealth. The NJDEP regulation has one emission standard for both new and existing EGUs. The Department believes there should be separate emission standards for new and existing coal-fired EGUs. Moreover, New Jersey has a limited number of coal-fired EGUs, which are not representative of the significantly varied boiler types in this Commonwealth. Because of these issues, this option was dismissed before completing any cost analysis.

The Department strongly opposes a cap-and-trade approach under the CAMR. First, the Department believes that the EPA does not have the legal authority to regulate mercury emissions under the less stringent provisions of section 111 of the CAA, as opposed to the provisions for hazardous air pollutants in section 112 of the CAA. Second, the Department believes that CAMR will significantly delay the control of mercury emissions from the EGUs. In light of these concerns, the Department developed a comprehensive approach for the reduction of mercury emissions from affected EGUs.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

Yes. The federal CAMR, which regulates mercury emissions from coal-fired EGUs, was promulgated by EPA under Section 111 of the CAA on May 18, 2005. 70 Fed. Reg. 28606. Although the federal requirements are incorporated by reference in their entirety in 25 Pa. Code Chapter 122, this final rulemaking will establish more stringent requirements to reduce mercury emissions from new and existing coal-fired EGUs. The CAMR established Phase 1 (2010-2017) mercury emissions budget of 1.78 tons for EGUs in Pennsylvania and the Phase 2 (2018) mercury emissions budget of 0.702 tons under the federal cap-and-trade program. Under the state-specific final rulemaking, however, in addition to prohibiting the banking and trading of mercury allowances, the owners and operators of existing EGUs must comply with the Phase 2 budget by 2015, three years earlier than the 2018 compliance date established under the federal CAMR. During Phase 1 of the program, the Department anticipates that the final rulemaking will achieve approximately 29 percent greater reductions than under the CAMR. During Phase 2, approximately 36 percent greater reductions should be achieved under the state-specific final-form regulation.

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(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

More than half of the states subject to the CAMR elected to develop more protective programs. These states have enacted legislation, adopted or proposed mercury regulations with emission standards that are more stringent than CAMR. These states include Connecticut, Illinois, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York and Wisconsin.

EGU owners and operators in Pennsylvania will need to comply with the requirements of the CAIR which is a cap-and-trade approach for sulfur dioxide (SO₂) and nitrogen oxides (NO_x) emissions. (70 Fed. Reg. 72268, November 22, 2005). Significant mercury emission reductions can be obtained as a "co-benefit" of controlling SO₂ and NO_x emissions through wet flue gas desulfurization and selective catalytic reduction techniques. Thus, the coordinated regulation of Hg, SO₂, and NO_x emissions allows mercury reductions to be achieved in a cost-effective manner

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

Yes. This final-form regulation supercedes the federal emission guidelines established under 40 CFR Part 60, Subpart HHHH for existing EGUs, which are adopted in their entirety and incorporated by reference in 25 Pa. Code Chapter 122 (relating to National Standards of Performance for New Stationary Sources).

New EGUs must comply with applicable requirements of the federal New Source Performance Standards in 40 CFR Part 60, Subpart Da and the more protective final form regulation.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

No additional public hearings or informational meetings are scheduled. The Environmental Quality Board published notice of the proposed rulemaking in the Pennsylvania Bulletin on June 24, 2006. Interested persons were allowed to submit written comments and a one-page summary to the Board by August 28, 2006. Public hearings were held at PADEP Regional offices in Pittsburgh on July 25, Harrisburg on July 26 and Norristown on July 27, 2006. The Board received comments from approximately 11,000 commentators with more than 99 percent of the commentators supporting the proposed rule.

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

Emission monitoring, recordkeeping and reporting requirements are contained in the final-form regulation. These requirements are similar to those already in place for other air contaminant emissions from the affected facilities.

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(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

Women of childbearing age and pregnant women are of special concern in terms of methylmercury exposure. The final-form regulation will improve public health (especially, women of childbearing age and young children) by reducing exposure to methylmercury. Methylmercury exposure prior to pregnancy can actually place the developing fetus at risk because methylmercury persists in body tissue and is only slowly excreted from the body. Low-dose prenatal methylmercury exposure has been associated with poor performance on neurobehavioral tests in children, including those tests that measure attention, visual spatial ability, verbal memory, language ability, fine motor skills, and intelligence.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

The final rulemaking will be effective on the date of publication in the *Pennsylvania Bulletin*. EGU owners and operators must demonstrate compliance with the Phase 1 requirements from January 1, 2010 to December 31, 2014. Starting January 1, 2015 and each year thereafter, EGU owners and operators must demonstrate compliance with the Phase 2 requirements.

No special permits or licenses are required. However, Title V operating permits must be modified by January 1, 2010 for existing affected EGUs. The requirements of the final-form regulation will also be included as applicable requirements in plan approvals for new EGUs.

(31) Provide the schedule for continual review of the regulation.

This final-form regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

