

December 20, 2007

Mr. David C. Cannon Jr.  
Designated Representative  
Allegheny Energy  
800 Cabin Hill Drive  
Greensburg, PA 15601

Re: Petition for an Alternative Mercury Monitor Certification Deadline for Units 1 and 2 at the Fort Martin Power Station (Facility ID (ORISPL) 3943)

Dear Mr. Cannon:

The United States Environmental Protection Agency (EPA) has reviewed the September 21, 2007 petition submitted under 40 CFR 75.80(h)(1) by the Monongahela Power Company (Monongahela Power), in which Monongahela Power requested an alternative mercury monitoring system certification deadline for Units 1 and 2 at the Fort Martin Power Station. EPA approves the petition in part, with conditions, as discussed below.

#### Background

Monongahela Power owns, and Allegheny Energy operates, two coal-fired boilers, Units 1 and 2, at the Fort Martin Power Station (Fort Martin), located in Maidsville, West Virginia. Units 1 and 2 are subject to the emission monitoring and reporting requirements of the Clean Air Mercury Regulation (CAMR). The owner or operator of an existing unit subject to CAMR is required to install and certify a continuous mercury (Hg) monitoring system, no later than January 1, 2009. These units are also subject to the Acid Rain Program.

Monongahela Power is currently installing flue gas desulfurization (FGD) systems on Fort Martin Units 1 and 2 to control sulfur dioxide (SO<sub>2</sub>) emissions with a co-benefit of reducing Hg emissions. Construction of the FGDs began in September 2007 and is expected to be completed by November 2009. New stacks will be built as part of the FGD construction projects, and the emissions from Units 1 and 2 will exit to the atmosphere through these stacks.

Due to the timing of the FGD installations and new stack constructions, CAMR requires Monongahela Power to certify Hg monitoring systems by January 1, 2009 on the existing stacks and then to meet a second Hg monitoring system certification deadline on the new stacks, when construction of these stacks is completed and the FGDs become operational. The second deadline results from the requirement that Monongahela Power must install and certify a Hg monitoring system on each new stack within 90 unit

operating days or 180 calendar days (whichever comes first) after emissions first exit to the atmosphere through the stack.

In the September 21, 2007 petition, Monongahela Power requested that the January 1, 2009 monitor certification deadline be extended to coincide with the monitor certification deadline associated with the FGD installations and construction of the new stacks. Monongahela Power proposed to report Hg emissions data in 2009 using the Hg low mass emissions methodology (HgLME) described in 40 CFR 75.81(c) through (f) and agreed to install and certify Hg monitoring systems for Fort Martin Units 1 and 2 no later than December 31, 2009.

#### EPA's Determination

EPA conditionally approves Monongahela Power's petition for an extension of the January 1, 2009 Hg monitoring system certification deadline for Fort Martin Units 1 and 2. Under the following unique circumstances, EPA has concluded that the January 1, 2009 Hg monitoring system certification deadline for these units should be conditionally extended:

- First, Monongahela Power is constructing new FGD systems (including new stacks) that will reduce SO<sub>2</sub> and Hg emissions from the units. If Monongahela Power were to install continuous Hg monitoring systems by January 1, 2009 on each of the existing stacks, Monongahela Power would also be required to install continuous Hg monitoring systems on the new stacks after completing construction of the FGD systems.
- Second, Monongahela Power states that construction of the FGD systems will be completed by November 2009 and has agreed to certify Hg monitoring systems on the new stacks by December 31, 2009.
- Third, the requirement for Hg emissions reductions under CAMR begins in 2010. Not only will Hg emissions data recorded during calendar year 2009 not be used to determine compliance with CAMR, but also, due to the future installation of FGD systems and the need to install and operate continuous Hg monitoring systems in new locations on new stacks, any continuous Hg monitoring systems installed on the existing stacks, and any pre-2010 Hg emissions data from such monitoring systems on the existing stacks, would not be representative of the units' Hg monitoring systems and Hg emissions in 2010 and thereafter.

EPA concludes that requiring continuous Hg monitoring systems to be installed and certified on the existing stacks at Fort Martin Units 1 and 2 by January 1, 2009 would serve little or no purpose under CAMR. The Agency is therefore approving, with conditions, an extension of that certification deadline to whichever one of the following dates occurs first: (a) December 31, 2009; (b) 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stacks or FGD systems; or

(c) 180 calendar days after the date on which emissions first exit to the atmosphere through the new stacks or FGD systems.

However, although EPA is extending the January 1, 2009 Hg monitor certification deadline for Fort Martin Units 1 and 2, Monongahela Power must still report Hg mass emissions using the HgLME monitoring methodology, and heat input data using the existing monitoring systems under the Acid Rain Program, for these units in 2009. Although the HgLME methodology is not intended for use by units such as Fort Martin Units 1 and 2 that have annual Hg mass emissions greater than 29 lbs, allowing the HgLME methodology to be used for 2009 is a reasonable alternative for getting emissions data that are required under CAMR, but that will not be used to determine whether the Hg emissions reductions required under CAMR (i.e., the reductions required in 2010 and thereafter) are met. In this case, Hg emissions data reported in 2009 using the HgLME methodology will not compromise the integrity of CAMR. Therefore, the conditions of this approval are as follows:

- (1) On or before December 31, 2008, Monongahela Power shall perform Hg emission testing on Fort Martin Units 1 and 2, at the existing stacks, as described in 40 CFR 75.81(c)(1). A minimum of three 1-hour test runs at normal load is required for each unit, while coal is being combusted. Units 1 and 2 shall be in operation at typical, normal load levels during the tests;
- (2) From the results of these emission tests, Monongahela Power shall determine a default Hg emission factor for each unit in  $\mu\text{g}/\text{m}^3$  at standard conditions. The default Hg concentration for each unit shall be the greater of: (a) The highest Hg concentration from any test run at that unit; or (b)  $0.50 \mu\text{g}/\text{m}^3$ ;
- (3) In 2009, for each hour of unit operation prior to completion of the FGD installation, Monongahela Power shall use the appropriate default Hg concentration from (2) above to calculate the hourly Hg mass emissions in ounces from each unit. These calculations shall be performed according to section 9.1.3 in Appendix F to 40 CFR Part 75. All Hg emissions from the units shall be accounted for. For any hour that quality-assured data from the stack gas flow rate monitor are unavailable, the appropriate missing data procedures from 40 CFR Part 75, Subpart D shall be used;
- (4) In 2009, Monongahela Power shall comply with the applicable recordkeeping and reporting requirements in §75.84 for Fort Martin Unit 1 and 2;
- (5) For the new monitoring systems installed on the new stacks, Monongahela Power shall follow the applicable monitor certification and data validation guidelines in Questions 16.14 through 16.16 in the “Part 75 Emissions Monitoring Policy Manual”. For the purposes of this approval, those general guidelines are extended to include Hg monitoring systems;

- (6) Monongahela Power shall install and certify continuous Hg monitoring systems on Fort Martin Units 1 and 2 by whichever one of the following dates occurs first: (a) December 31, 2009; or (b) 90 unit operating days after the date on which emissions first exit to the atmosphere through the new stacks or FGD systems; or (c) 180 calendar days after the date on which emissions first exit to the atmosphere through the new stacks or FGD systems; and
- (7) If, for a particular unit, the Hg monitoring system certification deadline in paragraph (7) above is not met, Monongahela Power shall report the maximum potential Hg concentration at that unit, as defined in section 2.1.7.1 of Appendix A to 40 CFR Part 75, beginning with the first unit operating hour following the deadline and continuing until all required certification tests of the required Hg monitoring system have been successfully completed.

EPA's determination relies on the accuracy and completeness of the information provided by Monongahela Power in the September 21, 2007 petition and is appealable under 40 CFR Part 78. If you have any questions about this determination, please contact Charles Frushour, at (202) 343-9847. Thank you for your continued cooperation.

Sincerely,

/s/

Sam Napolitano, Director  
Clean Air Markets Division

cc: Charles Perritt, EPA Region III  
Earl Billingsley, West Virginia DEP  
Charles Frushour, CAMD