



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 28 2003

OFFICE OF
AIR AND RADIATION

Dennis J. Murphy
Designated Representative
PPL Generation, LLC
Two North Ninth Street
Allentown, PA 18101-1179

Re: Petition to Use Low Mass Emissions Methodology for Montour (Facility ID (ORISPL) 3149), Units AUX1 and AUX2, and for Martins Creek (Facility ID (ORISPL) 3148), Unit AUX4B

Dear Mr. Murphy:

This is in response to your April 15, 2003 petition under § 75.66(a) in which PPL Generation, LLC (PPL) requested permission to use the low mass emissions methodology in § 75.19 for auxiliary boilers AUX1 and AUX2 at the Montour, Pennsylvania facility and auxiliary boiler AUX4B at the Martins Creek, Pennsylvania facility. EPA approves the petition, subject to the conditions discussed below.

Background

PPL owns and operates three oil-fired auxiliary boilers, two of which, Units AUX1 and AUX2, are located at the Montour, Pennsylvania plant and one of which, Unit AUX4B, is located at the Martins Creek, Pennsylvania facility. These three boilers are affected units in the NO_x Budget Trading Program under 25 Pa. Code Chapter 145. However, according to PPL, the Pennsylvania Department of Environmental Protection (PADEP) did not issue an official statement confirming the units' status with respect to Chapter 145 until the first week of April, 2003. Apparently, the units' regulatory status had been in question, since they did not appear on the list of affected units under Chapter 145, and PPL had not received any NO_x allowances for the units from PADEP. According to PPL, several inquiries were made to PADEP about this, because PPL believed that the boilers may have been mistakenly omitted from the Chapter 145 rule.

The April 15, 2003 petition asserts that due to the late date at which PADEP confirmed the units' NO_x Budget Program status, PPL was unprepared to comply with the monitoring and reporting requirements of Chapter 145. To comply with the Chapter 145 provisions, PPL would have had to meet the NO_x mass emissions and heat input monitoring and reporting requirements of 40 CFR Part 75, Subpart H by May 1, 2003. That is, one of the following monitoring options would have had to be implemented prior to the 2003 ozone season: (1) continuous emission

monitoring; or (2) the excepted methodology in Appendix E of Part 75 (if the boilers could qualify as peaking units under § 72.2); or (3) the excepted low mass emissions (LME) methodology in § 75.19 (if the units could qualify, based on historical NO_x emissions). In addition, the use of either version 2.1 or 2.2 of EPA's electronic data reporting (EDR) format would have been required.

Given that the ruling on the units' status was made less than a month before May 1, 2003, PPL believes that only compliance option (3), above, i.e., the LME methodology, can realistically be implemented in the 2003 ozone season. For the past several years, PPL has reported NO_x mass emissions and heat input data to EPA, in EDR version 2.0 format, under the Ozone Transport Commission (OTC) NO_x Budget Program, using a methodology similar (but not identical) to LME. Therefore, in the April 15, 2003 petition, PPL requested permission to use the LME methodology for Units AUX1, AUX2 and AUX4B. PPL also requested permission to use default NO_x emission rates, based on historical emission test data, for the purposes of reporting NO_x mass emissions in the second quarter of 2003. The historical test data used to derive these default NO_x emission rates were submitted to EPA on April 22, 2003 and May 7, 2003. The data do not meet the exact requirements of §§ 75.19(c)(1)(iv)(A), (I) and (J); however, in the April 15, 2003 petition, PPL stated its intention to perform additional emission testing to correct this deficiency by the end of the second quarter, 2003.

EPA's Determination

First, EPA performed an investigation to see whether Units AUX1, AUX2 and AUX4B qualify for LME status. The Agency reviewed the historical NO_x mass emissions data that were reported by PPL under the OTC Program, for the 2000, 2001 and 2002 ozone seasons. For each unit, the NO_x mass emissions for all three ozone seasons were well below the 50 ton threshold specified in § 75.19(a)(1)(i)(A)(2), being 6.9 tons, 5.9 tons, and 3.2 tons for Unit AUX1, 2.9 tons, 4.8 tons, and 9.2 tons for Unit AUX2, and 1.2 tons, 0.8 tons, and 0.0 tons for Unit AUX4B. Since PPL reports data from these units on a year-round basis, EPA also checked to see whether the annual NO_x mass emissions from each unit were less than 100 tons in 2000, 2001 and 2002, as required by § 75.19(a)(1)(i)(A)(2). For these three years, the reported annual NO_x tonnages for Units AUX1, AUX2 and AUX4B never exceeded 16.8 tons, 17.0 tons, and 7.8 tons, respectively. Therefore, all three units qualify to use the LME methodology in 2003.

Next, EPA reviewed the historical NO_x emission test data for Units AUX1, AUX2 and AUX4B submitted by PPL in support of the April 15, 2003 petition. For Units AUX1 and AUX2, the results of two emission tests were examined, i.e., one test from 1997 and one from 2002. The 1997 testing was done at about 60% of maximum capacity and the 2002 test was done at about 85% of full-load. For both units, the NO_x emission rates were essentially the same at both tested load levels, being 0.10 and 0.11 lb/mmBtu for Unit AUX1 and 0.11 and 0.12 lb/mmBtu for Unit AUX2. For Unit AUX4B, the results of only one test were available, from 1999. The test was performed at about 90% of full load and the NO_x emission rate was 0.18 lb/mmBtu. These test results show that for Units AUX1 and AUX2, the default NO_x emission rate used for reporting under the OTC Program (i.e., 0.15 lb/mmBtu) is conservatively high, but the 0.18 lb/mmBtu default emission rate for Unit AUX4B is not.

In view of these findings EPA conditionally approves PPL's petition to use the LME methodology to report NO_x mass and heat input data from these units in the 2003 ozone season. EPA also conditionally approves PPL's request to report a default NO_x emission rate of 0.15 lb/mmBtu for Units AUX1 and AUX2 in the second quarter of 2003. However, EPA denies PPL's request to report a default NO_x emission rate of 0.18 lb/mmBtu for Unit AUX4B in the second quarter of 2003, but will conditionally allow an emission rate of 0.25 lb/mmBtu to be reported instead for that unit. EPA believes that these default emission rates are sufficiently conservative to ensure that NO_x mass emissions will not be underestimated and that NO_x emission testing in accordance with § 75.19 will likely result in similar default emission rate values. The conditions of approval are as follows:

- (1) For Units AUX1, AUX2 and AUX4B, PPL shall report NO_x mass emissions and heat input data to EPA, using the low mass emissions methodology in § 75.19, beginning with the electronic quarterly report for the first¹ calendar quarter of 2003. The data shall be submitted in EDR version 2.2 format.
- (2) PPL shall use the approved default NO_x emission rates of 0.15 lb/mmBtu (for Units AUX1 and AUX2) and 0.25 lb/mmBtu (for Unit AUX4B) for each unit operating hour in the first and second quarters of 2003. However, beginning with the first operating hour of each unit after June 30, 2002, PPL shall use the following default NO_x emission rates for reporting purposes:
 - (a) If, for a particular unit, NO_x emission testing that meets the requirements of §§ 75.19(c)(1)(iv)(A), (I) and (J) has been successfully completed by June 30, 2003, use the highest 3-run average emission rate obtained at any tested load level for that unit; or
 - (b) If, for a particular unit, NO_x emission testing that meets the requirements of §§ 75.19(c)(1)(iv)(A), (I) and (J) has not been successfully completed by June 30, 2003, use the generic default NO_x emission rate of 2 lb/mmBtu from Table LM-2 in § 75.19 for that unit, until such testing has been completed.

¹ The first quarter, 2003 reports have already been submitted in EDR v 2.0 format, using the approved methodology for the OTC Program. These reports must be resubmitted by July 30, 2003, in EDR v 2.2 format, using the LME methodology and the default NO_x emission rates approved in this petition response (see condition (2), above).

EPA's determination relies on the accuracy and completeness of the information provided by PPL in the April 15, 2003 petition and on April 22, 2003 and May 7, 2003, and is appealable under Part 78. If you have any questions or concerns about this matter, please contact Robert Vollaro of my staff at (202) 564-9116. Thank you for your continued cooperation.

Sincerely,



Sam Napolitano, Acting Director
Clean Air Markets Division

cc: Renee McLaughlin, EPA Region III
Joseph Nazzaro, Pennsylvania Department of the Environment
Robert Vollaro, EPA, CAMD
