



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

JUL - 2 2002

OFFICE OF  
AIR AND RADIATION

Mr. David Cramer  
Group Leader, Air Management Services  
Mirant Mid-Atlantic, LLC  
8711 Westphalia Road  
Upper Marlboro, MD 20774

Re: Petition to Continue Using OTC Monitoring Guidance and EDR Version 2.0 in  
the 2002 Ozone Season for Mirant Mid-Atlantic Peaking Combustion Turbines

Dear Mr. Cramer:

This is in response to your May 31, 2002 petition under § 75.66 (a) in which Mirant Mid-Atlantic, LLC (Mirant) requested permission, for nine peaking combustion turbines, to continue using the January 28, 1997 Ozone Transport Commission (OTC) guidance document<sup>1</sup>, in conjunction with version 2.0 of EPA's Electronic Data Reporting (EDR) format, to report NO<sub>x</sub> mass emissions for the 2002 ozone season. EPA approves the petition for three of the turbines, but denies the petition for the other six units, for the reasons discussed below.

Background

Mirant owns and operates nine peaking combustion turbines, three of which are located at its Chalk Point, Maryland facility (i.e., GT1, GT2, and SMECO) and six of which are located at its Morgantown, Maryland facility (i.e., GT1, GT2, GT3, GT4, GT5 and GT6). Six of the turbines<sup>2</sup> (i.e., GT2 and SMECO at Chalk Point, and GT3, GT4, GT5 and GT6 at Morgantown) are affected units in the NO<sub>x</sub> Budget Trading Program, under COMAR 26.11.29 and 26.11.30. According to COMAR 26.11.29 and 26.11.30, Mirant is required to monitor and report nitrogen oxides (NO<sub>x</sub>) mass emissions and heat input for these six turbines, beginning on May 1, 2002,

---

<sup>1</sup> The guidance document is entitled "Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program."

<sup>2</sup> This was confirmed in a June 18, 2002 E-mail to EPA from Charles Frushour of the Maryland Department of the Environment (MDE).

using monitoring methodologies that meet the requirements of 40 CFR Part 75, Subpart H.

In 2000 and 2001, Mirant reported ozone season NO<sub>x</sub> mass emissions and heat input data for all nine of the combustion turbines, under the OTC NO<sub>x</sub> Budget Trading Program. The monitoring and reporting were performed using the January 28, 1997 OTC Emission Monitoring Guidance and EDR Version 2.0. However, the OTC program is being superseded by the NO<sub>x</sub> Budget Trading Program, established in response to the 1998 NO<sub>x</sub> State Implementation Plan (SIP) Call by the EPA Administrator. See 63 Fed. Reg. 57356 (October 27, 1998). The provisions of COMAR 26.11.29 and 26.11.30 include monitoring requirements for this new trading program in Maryland, starting with the 2002 ozone season.

Recognizing that the OTC monitoring methodology and the EDR version currently being used for the six combustion turbines affected by the NO<sub>x</sub> SIP Call do not satisfy the requirements of COMAR 26.11.29 and 26.11.30, Mirant requested relief from these requirements for the 2002 ozone season. In the May 31, 2002 petition, Mirant cited uncertainty over the final outcome revisions to 40 CFR Part 75 proposed by EPA on June 13, 2001 as the principal reason why few, if any, steps have been taken to bring the turbines into compliance with the monitoring requirements of COMAR 26.11.29 and 26.11.30 by May 1, 2002. Mirant also requested relief from the Part 75 monitoring and reporting requirements for Chalk Point Unit GT1 and Morgantown Units GT1 and GT2, even though these units are not in the NO<sub>x</sub> SIP Call.

#### EPA's Determination

- (1) EPA approves the petition for Chalk Point Unit GT1 and Morgantown Units GT1 and GT2, although the Agency notes that a petition is unnecessary for these units. Since these three turbines are only regulated under the OTC NO<sub>x</sub> Budget Program (COMAR 26.11.27 and 26.11.28) and are not affected units under the NO<sub>x</sub> SIP Call, Mirant is only required to monitor and report NO<sub>x</sub> mass emissions and heat input for these units according to the OTC Monitoring Guidance and using EDR version 2.0.
- (2) EPA denies the petition for Chalk Point Units GT2 and SMECO, and for Morgantown Units GT3, GT4, GT5 and GT6 for the following reasons:
  - First, COMAR 26.11.29 and 26.11.30, which Maryland promulgated in March 2000, have consistently required affected units, like these six combustion turbines, to monitor and report NO<sub>x</sub> mass emissions and heat input data in accordance with 40 CFR Part 75, beginning on May 1, 2002.
  - Second, EPA posted guidance on the Clean Air Markets Division homepage of the Internet in October, 2001, suggesting in detail steps for changing from OTC monitoring and reporting requirements to NO<sub>x</sub> Budget Trading Program monitoring and reporting. See "OTC Sources under the Federal NO<sub>x</sub> Budget Trading Program: Guidance on Changing Monitoring Methods and Upgrading Monitoring Plans to EDR v. 2.1"

(Clean Air Markets Division, U.S. EPA, October 12, 2001) and “Monitor Certification Guidelines for the NO<sub>x</sub> SIP Call and Section 126 Trading Programs” (Clean Air Markets Division, U.S. EPA, October 10, 2001) .

- Third, despite the monitoring and reporting requirements and guidance discussed above, Mirant apparently has done little or nothing to meet Part 75 requirements for any of these affected turbines. In the May 31, 2002 petition, Mirant claims that after reviewing a “redline” version of the Part 75 rule revisions<sup>3</sup>, it concluded that the monitoring methodologies currently being used under OTC program for some of the turbines would be disallowed, and an upgrade to Part 75, Appendix D and E methodologies would be required.

Even after reaching that conclusion, Mirant apparently did little or nothing even to start changing its monitoring and reporting and has provided no schedule for making the necessary changes. Moreover, EPA maintains that Mirant should have taken action to change its monitoring and reporting before the issuance of the redline version of the final rule. The June 13, 2001 proposed rule did not provide relief from the monitoring and reporting requirements of Subpart H of Part 75, and did not propose to substantively change the applicability, testing, monitoring or reporting requirements of either Appendix E or the associated Appendix D heat input monitoring methodology. Therefore, Mirant should have proceeded on the assumption that upgrades to Appendixes D and E would be required for some, if not all, of these affected units.

#### Monitoring and Reporting Requirements

1. For Chalk Point Unit GT1 and Morgantown Units GT1 and GT2, the electronic quarterly reports for the 2002 ozone season may be submitted in the same manner as in previous years under the OTC program, i.e., according to the OTC Monitoring Guidance and using EDR version 2.0.
2. For Chalk Point Units GT2 and SMECO and Morgantown Units GT3, GT4, GT5 and GT6, Mirant shall report NO<sub>x</sub> mass emissions and heat input data using Part 75-compliant monitoring methodologies and using EDR version 2.1, beginning with the 2002 ozone season. To achieve this, Mirant has the following compliance options:

---

<sup>3</sup> This apparently refers to the May 1, 2002 redline-strikeout version of Part 75 which EPA posted on the Internet, showing the rule changes that were approved by the EPA Administrator.

- (a) Install and certify Part 75-compliant fuel flowmeters and NO<sub>x</sub>-diluent CEMS. If this option is selected for a particular unit, Mirant shall report maximum potential NO<sub>x</sub> emission rate (as defined in § 72.2) and the maximum potential hourly heat input (as defined in § 72.2) for each unit operating hour in the ozone season until the fuel flowmeter and the CEMS have been certified. Mirant shall use a maximum potential NO<sub>x</sub> concentration (MPC) of 200 ppm (from Table 2-2 in Appendix A of Part 75) in the MER calculation and shall use the maximum design rated heat input capacity as the maximum potential hourly heat input, i.e., 420 mmBtu/hr for Chalk Point Unit GT2, 940 mmBtu/hr for the SMECO turbine, and 654 mmBtu/hr for Morgantown Units GT3, GT4 and GT5; or
- (b) If a unit qualifies as a peaking unit under § 72.2, install and certify a Part 75-compliant fuel flowmeter and use the excepted Appendix E methodology to account for hourly NO<sub>x</sub> emissions. If this option is selected, Mirant shall define a fuel flowmeter system and an Appendix E monitoring system in the monitoring plan for the unit, and shall certify the fuel flowmeter and shall perform NO<sub>x</sub> emission testing as described in section 2 of Appendix E, to establish fuel-specific baseline correlation curves of heat input versus NO<sub>x</sub> emission rate. Until the required fuel flowmeter certification and NO<sub>x</sub> emission testing are completed, Mirant shall report the maximum potential hourly heat input (as defined in § 72.2) and the fuel-specific maximum potential NO<sub>x</sub> emission rate (as defined in § 72.2), for each unit operating hour in the ozone season. See paragraph (a) immediately above for the appropriate NO<sub>x</sub> MPC value to use in the MER calculations and the appropriate maximum potential hourly heat input values; or
- (c) For Chalk Point Units GT2 and SMECO and Morgantown Unit GT6 only, use the revised low mass emissions (LME) methodology<sup>4</sup> in § 75.19. If the LME option is selected for Unit GT2 and/or SMECO at Chalk Point

---

<sup>4</sup> Under the final Part 75 rule (67 Fed. Reg. 40394, 40425 (June 12, 2002)), three of the six turbines (GT2 and SMECO at Chalk Point, and GT6 at Morgantown) qualify as low mass emissions units under revised § 75.19. Emissions data provided by Mirant in the May 31, 2002 petition, for 1999, 2000 and 2001 indicate that these units emitted less than 50 tons of NO<sub>x</sub> in each of the past three ozone seasons. However, Morgantown Units GT3, GT4 and GT5 do not qualify as LME units, since these units emitted more than 50 tons of NO<sub>x</sub> in 1999. EPA notes that in the May 31, 2002 petition, the NO<sub>x</sub> tonnages reported for Morgantown Units GT3, GT4, GT5 and GT6 for the year 2001 do not agree with the tonnages reported in the quarterly EDR reports. The actual tonnages reported in the EDR for these units are, respectively, 18.6, 22.0, 20.1 and 18.5, as opposed to 14.9, 18.5, 42.9 and 2.3 tons reported in the May 31, 2002 letter. These discrepancies do not affect the units' eligibility (or lack of same) for LME status. EPA considers the values reported in the EDR reports to be official.

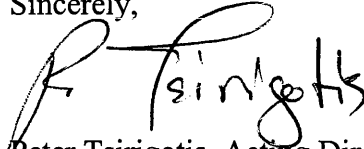
and/or Unit GT6 at Morgantown, Mirant shall either use the applicable generic NO<sub>x</sub> emission rate from Table LM-2 in § 75.19 or may, if such data are available, use fuel-and-unit-specific NO<sub>x</sub> emission rates determined by emission testing under the OTC NO<sub>x</sub> Budget Program, provided that the test data are less than five years old. If the test data are more than 5 years old, re-testing is required as described in § 75.19 (c)(1)(iv)(D). For heat input, Mirant may report either the maximum design unit heat input for every operating hour, as described in § 75.19 (c)(3)(i), or may use the long-term fuel flow methodology, as described in § 75.19 (c)(3)(ii).

3. Whichever compliance option under paragraph 2 above is selected for a particular unit, the electronic quarterly reports required under § 75.64 must be submitted in EDR version 2.1 format. If any report(s) for these units are submitted in EDR version 2.0 format, EPA will require the report(s) to be resubmitted.
4. The requirement under COMAR 26.11.29 and 26.11.30 to report data in EDR version 2.1 for the 2002 ozone season supersedes the requirement in COMAR 26.11.27 and 26.11.28 to report data in EDR version 2.0 for the OTC NO<sub>x</sub> Budget Program. Therefore, for the six units listed in paragraph 2 above, only quarterly reports in EDR v.2.1 shall be submitted, for each quarter of the 2002 ozone season.
5. Finally, EPA notes that for the LME option described in paragraph 2(c) above, a software tool is available to assist in generation of the quarterly EDR reports. The Agency's Monitoring Data Checking (MDC) software (which is available on the EPA website) has a LME module capable of creating a version 2.1 EDR report for a low mass emissions unit, if the dates and hours of unit operation, type of fuel combusted, long-term fuel usage data, and the appropriate default NO<sub>x</sub> emission rates and heat input rates are input into the software. EPA further notes that Table C-14 in Appendix C of the EDR Version 2.1 Reporting Instructions (dated January 24, 2001) summarizes the essential EDR record types that must be included in a quarterly report for a LME unit.

EPA's determination in this letter relies on the accuracy and completeness of : (a) the information provided by Mirant in the May 31, 2002 petition; (b) data reported by Mirant in the electronic quarterly reports required under § 75.64; and (c) the June 18, 2002 E-mail to EPA from the MDE. The determination is appealable under part 78. If you have any questions or

concerns about this determination, please contact Robert Vollaro, at (202) 564-9116. Thank you for your continued cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Tsirigotis". The signature is fluid and cursive, with a large initial "P" and a long horizontal stroke extending across the word "Tsirigotis".

Peter Tsirigotis, Acting Director  
Clean Air Markets Division

cc: Renee McLaughlin, EPA Region III  
Charles Frushour, Maryland Department of the Environment  
Robert Vollaro, CAMD