



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.  
Secretary of Natural Resources

Northern Virginia Regional Office  
13901 Crown Court  
Woodbridge, VA 22193-1453  
(703) 583-3800 fax (703) 583-3801  
www.deq.state.va.us

Robert G. Burnley  
Director

Jeffery A. Steers  
Regional Director

## COMMONWEALTH OF VIRGINIA STATE AIR POLLUTION CONTROL BOARD

### ORDER BY CONSENT

### ISSUED TO

**MIRANT POTOMAC RIVER, LLC**  
**Registration No. 70228**

#### **SECTION A: Purpose**

This is a Consent Order issued under the authority of Va. Code § § 10.1-1307D and 10.1-1307.1, between the Board and Mirant Potomac River, LLC for the purpose of ensuring compliance with ambient air quality standards incorporated at 9 VAC Chapter 30 and Va. Code § 10.1-1307.3(3) requiring certain emissions modeling and analysis related to the Potomac River Power Station located in Alexandria, Virginia.

#### **SECTION B: Definitions**

Unless the context clearly indicates otherwise, the following words and terms have the meanings assigned to them below:

1. "Va. Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Air Pollution Control Board, a permanent collegial body of the Commonwealth of Virginia as described in Va. Code §§ 10.1-1301 and 10.1-1184.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality.

5. "Order" means this document, also known as a Consent Order.
6. "Mirant," means Mirant Potomac River, LLC, a limited liability company qualified to do business in Virginia. Mirant Potomac River, LLC is owned Mirant Corporation and operated by Mirant Mid-Atlantic, LLC.
7. "Facility" means the Potomac River Generating Station owned and operated by Mirant located at 1400 North Royal Street, Alexandria, Virginia, 22314. The facility is a five unit, 488 MW coal-fired electric generating plant.
8. "NVRO" means the Northern Virginia Regional Office of DEQ, located in Woodbridge, Virginia.
9. "The Permit" means the Stationary Source Permit to Operate issued by DEQ to the facility on September 18, 2000, pursuant to 9 VAC 5-80-800, *et seq.*
10. "Marina Towers" means a multiple unit residential condominium building located at 501 Slaters Lane, Alexandria, Virginia, in close proximity to the facility.
11. "Downwash" means the effect that occurs when aerodynamic turbulence induced by nearby structures causes pollutants from an elevated source (such a smokestack) to be mixed rapidly toward the ground resulting in higher ground-level concentrations of pollutants.
12. "NAAQS" means the primary national ambient air quality standards established by the U.S. Environmental Protection Agency for certain pollutants, including sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), ozone, and particulate matter (PM), pursuant to § 109 of the federal Clean Air Act, 42 USC § 7409, set forth at 40 CFR Part 50 and incorporated at 9 VAC Chapter 30. NAAQS are established at concentrations necessary to protect public health with an adequate margin of safety.
13. "NO<sub>x</sub>" means oxides of nitrogen, which is a pollutant resulting from the combustion of fossil fuels and a precursor to the formation of ozone.
14. "PM<sub>10</sub>" means particulate matter with an aerodynamic diameter less than or equal to 10 micrometers and is a pollutant resulting from, among other things, the combustion of fossil fuels.

### **SECTION C: Findings of Fact and Conclusions of Law**

1. In order to ensure compliance with the Northern Virginia area's National Ambient Air Quality Standard (NAAQS) for ozone, the Department is in the process of revising the facility's Stationary Source Permit to Operate for the purpose of clarifying the facility's ozone season

(May 1 through September 30) emission requirements for NO<sub>x</sub>. A public hearing on the proposed permit revision was held in Alexandria, Virginia, on the evening of April 12, 2004.

2. Among the comments offered at the public hearing by Alexandria residents was that DEQ should require Mirant to perform comprehensive modeling to assess the impact of emissions from the facility on the area in the immediate vicinity of the facility.

3. At or about the time of the public hearing, certain residents of Alexandria, Virginia, provided the Department with a document entitled "Screening-Level Modeling Analysis of the Potomac River Power Plant Located in Alexandria, Virginia" prepared by Sullivan Environmental Consulting, Inc., dated March 29, 2004 (the Sullivan Screening). The Sullivan Screening was commissioned by, among others, certain residents of Marina Towers for the purpose of assessing whether emissions from the facility may cause exceedances of certain NAAQS at Marina Towers as a result of "downwash." The Sullivan Screening concluded that, "on average, meteorological conditions associated with plume impaction conditions on the Marina Towers condominium were screened to occur as often as 1,200 hours per year."

4. Although the Sullivan Screening does not establish conclusively that emissions from the facility result in exceedances of the NAAQS at Marina Towers, the Department believes that the results of the Sullivan Study warrant that further comprehensive analysis be conducted in accordance with DEQ and EPA approved modeling procedures in order to more fully determine the effect of emissions from the facility on the ambient air quality at Marina Towers and in the area in the immediate vicinity of the facility.

#### **SECTION D: Agreement and Order**

Accordingly, the Board, by virtue of the authority granted it in Va. Code §§ 10.1-1307 D and 10.1-1307.1 orders Mirant, and Mirant agrees, to perform the actions described in this section of the Order:

1. Mirant shall perform a refined modeling analysis to assess the effect of "downwash" from the facility on ambient concentrations of SO<sub>2</sub>, NO<sub>2</sub>, CO, and PM<sub>10</sub> for comparison to the applicable NAAQS in the area immediately surrounding the facility. In addition, Mirant shall perform a refined modeling analysis to assess the effect of "downwash" from the facility on ambient concentrations of mercury for comparison to the applicable Standards of Performance for Toxic Pollutants set forth in 9 VAC 5-60-200, *et seq.*, in the area immediately surrounding the facility.
2. The protocol and methodology for the modeling analysis shall be in accordance with EPA and DEQ methods and shall be approved by DEQ prior to commencement of the modeling. Mirant shall submit a proposed modeling protocol and methodology to Kenneth L. McBee, DEQ Air Modeling Program Coordinator, 629 E. Main St., Richmond VA 23219, within twenty-one (21) days of the effective date of this Order.

3. Mirant shall perform the modeling analysis immediately upon receiving written approval of the modeling protocol and methodology from DEQ. Mirant shall submit the results of the modeling analysis to Mr. McBee and the Director of the Department's Northern Virginia Regional Office no later than sixty (60) days after Mirant receives written approval of the modeling protocol and methodology.
4. In the event the modeling analysis indicates that emissions from the facility may cause exceedances of the NAAQS for SO<sub>2</sub>, NO<sub>2</sub>, CO, or PM<sub>10</sub>, or exceedances of the Standards of Performance for Toxic Pollutants for mercury in the area immediately surrounding the facility, DEQ shall require Mirant to submit to DEQ, within ninety (90) days of submitting the modeling analysis, a plan and schedule to eliminate and prevent such exceedances on a timely basis. Upon review and approval of that plan and schedule by DEQ, the approved plan and schedule shall be incorporated by reference into this Order.
5. Mirant agrees to waive any objections it may otherwise be entitled to assert under law should DEQ seek to incorporate the approved plan and schedule into the facility's permit.

#### **Section E: Administrative Provisions**

1. The Board may modify, rewrite, or amend this Order with the consent of Mirant for good cause shown by Mirant, or after a proceeding as required by the Administrative Process Act for a case decision.
2. This Order addresses only those issues specifically identified herein. This Order shall not preclude the Board or the Director from taking any action authorized by law, including, but not limited to seeking subsequent remediation of the facility as may be authorized by law and/or taking subsequent action to enforce the terms of this Order. This order shall not preclude appropriate enforcement actions by other federal, state or local regulatory agencies for matters not addressed herein.
3. Solely for the purposes of the execution of this Order, for compliance with this Order, and for subsequent actions with respect to this Order, Mirant consents to the jurisdictional allegations and conclusions of law contained herein.
4. Mirant declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 2.2-4000 *et seq.*, and the Air Pollution Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order, or any subsequent deliverables required to be submitted by Mirant and approved by the Department, without the consent of Mirant.

5. Failure by Mirant to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or Director as a result of such violations.

6. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.

7. Mirant shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or other such circumstance. Mirant must show that such circumstances resulting in noncompliance were beyond its control and not due to a lack of good faith or diligence on its part. Mirant shall notify the Director, NVRO, in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:

- a. The reasons for the delay or noncompliance;
- b. The projected duration of any such delay or noncompliance;
- c. The measures taken and to be taken to prevent or minimize such delay or noncompliance; and

The timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Director, NVRO, in writing within 24 hours of learning of any condition above, which Mirant intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

8. This Order is binding on the parties hereto, parent corporations, or their successors in interest, designees, assigns.

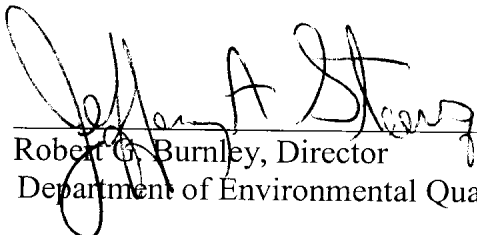
9. This Order shall become effective upon execution by both the Director of the Department of Environmental Quality or his designee and Mirant.

10. This Order shall continue in effect until:

- a. Mirant petitions the Director or his designee to terminate the order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
- b. The Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to Mirant.


Termination of this Order, or of any obligation imposed in this Order, shall not operate to relieve Mirant from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

AND IT IS ORDERED this 23<sup>rd</sup> day of SEPTEMBER 2004.

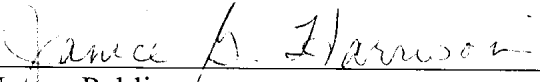
By:   
Robert G. Burnley, Director  
Department of Environmental Quality

Mirant Potomac River, LLC, voluntarily agrees to the issuance of this Order.

MIRANT POTOMAC RIVER, LLC

by:   
Lisa D. Johnson, President

The foregoing instrument was signed and acknowledged before me on this 17<sup>th</sup> day of County of  
Sept 2004 by Lisa D Johnson of Mirant Potomac River, LLC, in the City of  
Prince Georges, Commonwealth of Virginia.

  
Notary Public

My Commission expires: 06/07/05