



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, Virginia 23060-6296  
(804) 527-5020

Peter W. Schmidt  
Director

Gerard Seeley, Jr.  
Regional Director

### CONSENT AGREEMENT

#### WITH

City of Hopewell  
P. O. Box 969  
Hopewell, Virginia 23860

Registration No. 50735

#### SECTION A: Purpose

This Agreement establishes a Reasonably Available Control Technology (RACT) standard for the Hopewell Regional Wastewater Treatment Facility, for the control of volatile organic compound (VOC) emissions in the Richmond Ozone Nonattainment Area as required by Section 120-04-0407 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This RACT standard shall be the basis for VOC emissions control for this facility.

#### SECTION B: References

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

"Agreement" means this Consent Agreement.

"Board" or "SAPCB" means the State Air Pollution Control Board, a collegiate body of the Commonwealth of Virginia described in §10.1-1301 of the Code. Particular powers and duties of the Board are referred to in Section C of this document.

"Code" means the Code of Virginia.

"DEQ" means the Department of Environmental Quality, an agency of the Commonwealth described in §10.1-1183 of the Code.

"Director" means the Director of the Department of Environmental Quality. Particular powers and duties of the Director are described in Section C of this document.

"EPA" means the United States Environmental Protection Agency.

"Hopewell" or "affected facility" means the City of Hopewell, owner of the Hopewell Regional Wastewater Treatment Facility, located at 231 Hummel-Ross Road, Hopewell, Virginia.

"Major Stationary Source" means any stationary source with a theoretical potential to emit 100 tons or more per year of any criteria pollutant.

"New source review program" means a program for the preconstruction review and permitting of new stationary sources or expansions to existing ones in accordance with regulations promulgated to implement the requirements of §§ 110 (a)(2)(C), 165 (relating to permits in prevention of significant deterioration areas) and 173 (relating to permits in nonattainment areas) of the federal Clean Air Act.

"Non-CTG" means a source type for which the EPA has not issued a Control Technique Guideline (CTG), and thus has not established RACT for that source type.

"Piedmont Regional Office" refers to the staff of the office of the Department of Environmental Quality, 4949 Cox Road, Glen Allen, Virginia.

"Reasonably Available Control Technology" or "RACT" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

"Regional Director" means the Director of the Piedmont Regional Office.

"SAPCB Regulations" means the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

"SIP" means the State Implementation Plan.



"Theoretical potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. It is based on emissions at design capacity or maximum production and maximum operating hours (8,760 hours per year) before add-on controls, unless the source is subject to state and federally enforceable permit conditions which limit production rates or hours of operation.

"VOC" means volatile organic compounds as defined by Section 120-01-02 of the SAPCB Regulations.

### SECTION C: Authority

1. Chapter 13 of Title 10.1 of the Code creates the Board and vests in it the authority to supervise and control various aspects of air pollution in the Commonwealth. Among the Board's powers is the authority to promulgate regulations "abating, controlling and prohibiting" air pollution, found in §10.1-1308 of the Code.
2. Pursuant to its authority, the Board has promulgated the SAPCB Regulations, which first took effect March 17, 1972, and have been periodically amended.
3. Pursuant to §10.1-1307.D of the Code, the Board has the authority to issue orders to diminish or abate the causes of air pollution and to enforce its rules and regulations. Orders of the Board are enforceable pursuant to §§10.1-1316 and 10.1-1320 of the Code.
4. The Director is the executive officer of the Board. Under §10.1-1307.2 A of the Code, the Director is to perform those duties required of him by the Board. Additionally, under §10.1-1307.3 of the Code, the Director has such powers to supervise, administer, and enforce the provisions of Chapter 13 of Title 10.1 of the Code, as well as the regulations and orders of the Board, as are conferred upon him by the Board. The powers and duties conferred and imposed upon the Director under §§10.1-1307.2 and 10.1-1307.3 of the Code are continued under §10.1-1185 of the Code.
5. Under §10.1-1307.2 B of the Code, the Director may be vested with the authority of the Board when it is not in session, subject to such regulations or delegation as may be prescribed by the Board. Appendix F of the SAPCB Regulations contains the Delegation of Authority from the Board to the Director. In Section II A of Appendix F the Director is given the authority, with

some exceptions, to act for the Board when it is not in session and to issue consent orders and emergency special orders.

SECTION D: Findings

1. The City of Hopewell operates a wastewater treatment facility located at 231 Hummel-Ross Road in Hopewell, Virginia.
2. Section 120-04-0407 of the SAPCB Regulations, which became effective on July 1, 1991, requires RACT for all non-CTG major stationary sources of VOC emissions in the Richmond Ozone Nonattainment Area, which includes the Cities of Richmond, Hopewell, and Colonial Heights; and the Counties of Henrico, Hanover, Chesterfield, and Charles City.
3. Hopewell was determined to be a non-CTG major stationary source of VOC emissions in the Richmond Ozone Nonattainment Area.
4. Hopewell has performed a RACT analysis, which was submitted to the DEQ on February 2, 1996.
5. Based on influent data, emissions modeling using the BASTE model, and emissions sampling, the total maximum expected annual VOC emissions for the facility are estimated to be 225.6 tons. VOC emission sources are broken down in the RACT Analysis as follows:
  - a. Maximum expected emissions from the Bar Screens are estimated to be 0.13 tons/year.
  - b. Maximum expected emissions from the Grit Chambers/Parshall Flume are estimated to be 64.31 tons/year.
  - c. Maximum expected emissions from the Primary Clarifiers/Supernatant Return Discharge are estimated to be 39.02 tons/year.
  - d. Maximum expected emissions from the HPO Aeration Tanks are estimated to be 0.25 tons/year.
  - e. Maximum expected emissions from the Secondary Clarifiers are estimated to be 10.52 tons/year.



- f. Maximum expected emissions from the Gravity Thickeners/DAF Thickeners are estimated to be 3.90 tons/year.
  - g. Maximum expected emissions from the Supernatant Return Wetwell are estimated to be 1.93 tons/year.
  - h. Maximum expected emissions from the Combined Solids Handling Sources (Sludge Holding Tanks, Decant Tanks, Non-Potable Wetwell, Vacuum Pumps, Vacuum Filter Canopy Hoods, and Heat Treatment Reactors) are estimated to be 44.38 tons/year.
  - i. Maximum expected emissions from the Multiple Hearth Furnace are estimated to be 54.31 tons/year.
  - j. Maximum expected emissions from the Solids Handling Building Boilers are estimated to be 0.54 tons/year.
  - k. Maximum expected emissions from the Ventilation Fans in the Solids Handling Building are estimated to be 6.26 tons/year.
6. Based on maximum expected emissions, RACT for the Grit Chambers/Parshall Flume is determined to be cover and vent.
7. Since it is not cost effective to control VOC emissions from any other sources within the facility, RACT is determined to be no control for the remaining sources.
8. Based on the RACT proposed above, total maximum expected annual VOC emissions from the affected facility after RACT has been applied are estimated to be less than 225.6 tons per year.

**SECTION E: Agreement**

Accordingly, the Board and Hopewell agree that:

- 1. VOC emissions from the affected facility shall be controlled as outlined in this Agreement.
- 2. VOC emissions from the Grit Chambers/Parshall Flume shall be controlled by a cover and vent. The cover and vent shall be installed and operational no later than 24 months from the effective date of this Agreement.

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3. Hopewell shall comply with all applicable SAPCB Regulations including the requirements for notification, recordkeeping, and reporting.
  4. Hopewell shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
    - a. at reasonable times to enter upon Hopewell's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this agreement;
    - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this agreement or the SAPCB Regulations;
    - c. to inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this agreement or the SAPCB Regulations; and
    - d. to sample or test at reasonable times.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

5. Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate prompt response by Hopewell to requests for information to include process data and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§2.1-340 through 2.1-348 of the Code of Virginia; §§10.1-1314 and 10.1-1314.1 of the Code of Virginia; and Section 120-02-30 of the SAPCB Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
6. At any time in the future, should Hopewell plan any modifications (within the context of the new source review program) of the affected facility covered by this Agreement, Hopewell shall have the right to apply,



to the Board for a new source review permit and the Board may consent to such modifications provided such modifications will meet all of the new source review permit program regulatory requirements in existence at that time.

7. The Board may modify, rewrite, or amend this Agreement with the consent of Hopewell, for good cause shown by Hopewell, or on its own motion provided approval of the changes is accomplished in accordance with SAPCB regulations, the Administrative Process Act (§ 9-6.14:1 et. seq.) and 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans).
8. So long as this Agreement remains in effect, Hopewell waives the right to any hearing pursuant to §§9-6.14:11 and 9-6.14:12 of the Code and to judicial review of any issue of fact or law contained herein. Nothing herein, however, shall be construed as a waiver of the right to a hearing or to judicial review of any action taken by the Board to enforce this Agreement.
9. Compliance with this Agreement shall be deemed compliance with Section 120-04-0407 of the SAPCB Regulations. Failure by Hopewell to comply with any of the terms of this Agreement 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 as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
10. Hopewell shall not be responsible for failure to comply with any of the terms and conditions of this Agreement if such noncompliance is caused by any act of God, fire, strike, or other occurrences beyond Hopewell's control resulting in impossibility of compliance, if Hopewell shows that such occurrences were beyond its control and were not due to a lack of good faith or diligence on the part of Hopewell. When circumstances such as those mentioned above are anticipated to occur, are occurring, or have occurred, which may cause noncompliance with any material term or condition of this Agreement, Hopewell shall notify DEQ within fifteen (15) days of the occurrence of the reason(s) for and projected duration of such noncompliance and the measures taken or to be taken by Hopewell to prevent or minimize such noncompliance.

11. Hopewell declares it has received fair and due process under the Administrative Process Act (§9-6.14:1 et. seq.).
12. This Agreement shall become effective upon signature by both parties and shall continue in effect indefinitely or until otherwise terminated by the Board.



The foregoing Consent Agreement has been executed on behalf of the STATE AIR POLLUTION CONTROL BOARD of the COMMONWEALTH OF VIRGINIA and on behalf of the City of Hopewell, each by its duly authorized representatives, or self, on the dates indicated below.

DEPARTMENT OF ENVIRONMENTAL QUALITY  
OF THE COMMONWEALTH OF VIRGINIA

5/30/96  
(date)

BY: John M. Daniel  
Peter W. Schmidt  
Director

CITY OF HOPEWELL

May 28 1996  
(date)

BY: Clinton H. Strong  
Clinton H. Strong  
City Manager

STATE OF VIRGINIA  
CITY OF RICHMOND

The foregoing instrument was acknowledged before me this 28th day of May, 1996, by Clinton H. Strong, City Manager, City of Hopewell, on behalf of the City.

My commission expires May 31, 1999.

Mary Frances Pitts  
Notary Public

