



ENCLOSURE 1

Peter W. Schmidt
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060-6296
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Gerard Seeley, Jr.
Regional Director

CONSENT AGREEMENT

WITH

Stone Container Corporation
Stone Container - Hopewell Mill
910 Industrial Street
Hopewell, Virginia 23860

Registration No. 50370

SECTION A: Purpose

This Agreement establishes a Reasonably Available Control Technology (RACT) standard for the Stone Container Corporation, Hopewell Mill, 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.

"ADTP" means Air Dried Tons of Pulp, a unit used to measure production from the Pulp Mill operations at the Hopewell Mill

"ADTFP" means Air Dried Tons of Finished Product, a unit used to measure production from the Paper Mill operations at the Hopewell Mill

"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 described 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.

"Major Stationary Source" means any stationary source with a theoretical potential to emit of 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.

"Stone Container" or "affected facility" means Stone Container Corporation, Stone Container Hopewell Mill, located at 910 Industrial Street, Hopewell, 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 of the Department of Environmental Quality, 4949-A Cox Road, located in Glen Allen, Virginia.

"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 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. Stone Container Corporation operates a Kraft Pulp and Paper Mill located at 910 Industrial Street, in the city of 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 expanded 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. Section 120-04-0407 C of the SAPCB Regulations, as amended January 1, 1993, requires facilities subject to the regulation to submit, within 3 months of the effective date of the standard, a schedule acceptable to the Board for making a determination of RACT. Section 120-04-0407 C of the SAPCB Regulations also requires facilities subject to the regulation to submit a schedule acceptable to the Board for achieving compliance with RACT as expeditiously as possible but no later than May 31, 1995. In a letter dated February 23, 1993, the Department of Air Pollution Control, now DEQ, notified Stone Container that the Hopewell Mill was potentially subject section 120-04-0407.
4. In a letter dated March 26, 1993, Stone Container Corporation notified the Department that the Hopewell Mill had a theoretical potential to emit VOC's over 100 tons per year and was subject to a RACT determination in accordance with section 120-04-0407 of the SAPCB Regulations. In that same letter, the Hopewell Mill proposed July, 1993 as the date by which a determination of RACT would be made and that the date by which Hopewell Mill would achieve compliance with RACT would be dependent on the Department's review time.
5. In a July 30, 1993 letter to the Department of Environmental Quality - Piedmont Regional Office, the Hopewell Mill transmitted the initial draft RACT determination for its facility. The document remained as a draft document throughout the review period. Stone Container submitted the final draft RACT Document to DEQ on January 18, 1996.
6. Based on a maximum achievable annual throughput of 450,000 ADTP through the Kraft Pulp Mill and 566,115 ADTFP from the Paper Mill, the following emissions are summarized as the Pre-RACT emissions in the RACT analysis:

- a. No quantifiable VOC emissions, originating from either point or fugitive sources, result from process operations at the Wood Handling and Storage area of the Hopewell Mill.
 - b. Total VOC emissions from the Kraft Pulp Mill area, excluding NCG system contributors, of the Hopewell Mill prior to implementation of RACT are estimated to be 79.2 tons per year.
 - c. Total VOC emissions from the Paper Mill area of the Hopewell Mill prior to implementation of RACT are estimated to be 134.1 tons per year.
 - d. Total point source VOC emissions from the Co-product recovery area, excluding NCG system contributors, of the Hopewell Mill prior to implementation of RACT are estimated to be 36.0 tons per year.
 - e. Total point source VOC emissions from the Chemical Recovery area, excluding NCG system contributors, of the Hopewell Mill prior to implementation of RACT are estimated to be 122.8 tons per year.
 - f. Total VOC Emissions from the Power Generation Area of the Hopewell Mill prior to implementation of RACT are estimated to be 341.5 tons per year.
 - g. Total Uncontrolled VOC emissions from the Non-condensable Gas system vented to the atmosphere prior to implementation of RACT are estimated to be 337.5 tons per year.
 - h. Total VOC emissions from the Stone Container Hopewell Mill prior to implementation of RACT are estimated to be 1393 tons per year.
7. The Chemical Recovery area of the Hopewell Mill currently uses city/river water as the source of make-up water. The use of city/river water as the make-up water source for the Chemical Recovery area prevents the introduction of VOC's from other sources within the Mill that could contribute VOC emissions to atmospheric emissions points within this area. RACT for the Chemical Recovery area is deemed to be existing controls; the use of city/river water make-up.
8. The Brown Stock Washers are the major VOC source within the Pulp Mill Area of the Hopewell Mill, excluding NCG system contributors. VOC emissions from this source are fugitive emissions and are currently

uncontrolled. Total estimated annual VOC emissions from this source are 42 tons per year. The economic analysis performed for this emissions source and contained in the RACT Determination Document dated January 18, 1996 indicate that add-on incineration controls for this source are not economically feasible.

9. The Pulp Mill area of the Hopewell Mill contains the Weak Black Liquor Filter which is estimated to emit 18.6 tons per year of VOC's. The economic analysis performed on the Weak Black Liquor Vent stream contained in the RACT Determination Document dated January 18, 1995 indicated that piping these emissions to an existing combustion source was economically feasible. In lieu of piping this vent stream to an existing combustion source at the Hopewell Mill, Stone Container Corporation has indicated that they will replace this filter with a new Black Liquor Filter that will not emit point source VOC emissions. RACT for the Weak Black Liquor Vent Stream is deemed to be replacement of the existing filter with the new No-emissions Filter and elimination of the existing emission point.
10. DEQ deemed that meeting Rule 4-25 of The Virginia Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution would be considered RACT for storage tanks that meet the applicability requirements of Section 120-04-2501 of Rule 4-25.
11. The Paper Mill area of the Hopewell Mill currently has the following sources of VOC emissions; the Paper Machine Fourdrinier which has estimated emissions of 7.1 tons per year, the Paper Press Vents which have estimated emissions of 28.3 tons per year, the Paper Dryers which have estimated emissions of 62.2 tons per year, and the Vacuum Pumps which have estimated emissions of 20.1 tons per year. The economic feasibility analysis for each of the sources indicated that add-on controls were not economically feasible.
12. The Co-Product Recovery area of the Hopewell Mill currently has two separate systems; Turpentine Recovery and Tall Oil Recovery. The sources of atmospheric VOC emissions in the Turpentine Recovery system are the turpentine recovery condensers which vent to the Non-condensable gas system; and the turpentine decanter and turpentine storage tank which both contribute negligible amounts of VOC emissions. The sources of atmospheric VOC emissions in the Tall Oil Recovery system include: The Batch Reactor Vent which has estimated emissions of 36 tons per year, and the Brine Neutralization Tank and the Tall Oil Settling Tank which both contribute negligible amounts of VOC emissions. RACT for the Tall Oil Batch Reactor vent is deemed to be a Packed Tower Scrubber.

13. The Power Generation area of the Hopewell Mill consists of the Combination Boiler which incinerates a combination of Coal and Wood Residue. The Combination Boiler is currently permitted and is estimated to emit 341.7 tons per year of VOC's. The existing controls on the Combination Boiler are 1) an Electrostatic Precipitator for particulates control, 2) permit limitations on the sulfur content of the coal to control sulfur dioxide emissions, and 3) burner design and good combustion practices to control Nitrogen Oxides. The VOC's which are emitted from this boiler are products of combustion of coal and wood waste from the process. The main source of VOC's from this boiler is the combustion of wood waste. The boiler is operated at maximum capacity for 8760 hours per year subject to mechanical availability. Limiting wood waste combustion would result in increased sulfur emissions from coal combustion. RACT for the Combination Boiler is deemed to be no additional controls.
14. The Non-condensable Gas system of the Hopewell Mill collects vented non-condensable gases from various sources throughout the Mill. These VOC emissions are routinely vented to the Lime Kiln except in situations where the Lime Kiln is unavailable for use as an incinerator. In situations where the Lime Kiln is not in service for use as an incinerator, the Non-condensable gas system is vented directly to the atmosphere.
15. The Non-condensable Gas system of the Hopewell Mill, when venting to the atmosphere, emits an estimated 33.8 tons of VOC's per year. The economic analysis performed on this vent stream indicated that additional incineration is not economically feasible. The Non-condensable gases have historically been vented to the atmosphere less than 10% of the time due to Lime Kiln downtime. This is within the requirements of Section 120-02-34 E. for malfunctions. RACT for the NCG system is deemed to be use of existing controls, that is incineration in the Lime Kiln.
16. Based on the RACT proposed in Paragraphs D.7, D.8, D.9, D.10, D.11, D.12, D.13, and D.15 above, total VOC actual emissions from the affected facility after RACT has been implemented are estimated to be 1065.0 tons/year.

SECTION E: Agreement

Accordingly, the Board and Stone Container agree that:

1. This Agreement establishes Reasonably Available Control Technology for the Stone Container Corporation - Hopewell Mill as required by Section 120-04-07 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution as executed between Stone Container and DEQ.
2. RACT for the Chemical Recovery area of the Hopewell Mill is deemed to be no additional controls. Stone Container will continue the practice of using city/river water as the sole source of make-up water in the Chemical Recovery area.
3. RACT for the Weak Black Liquor Filter within the Pulp Mill area of the Hopewell Mill shall be replacement of the existing filter with a new, No-emissions Filter. The new filter shall be installed by December, 1997. The new filter shall be designed, installed, operated and controlled in such a manner as to eliminate the existing emissions point.
4. RACT for VOC sources within the Pulp Mill area of the Hopewell Mill, excepting the Weak Black Liquor Filter and the contributors to the Non-Condensable Gas system, shall be no additional controls. Stone Container shall continue to operate the Pulp Mill area in a manner consistent with minimizing VOC emissions to the extent practicable and in a manner consistent with good air pollution control practices.
5. RACT for VOC sources within the Paper Mill and Power Generation areas of the Hopewell Mill shall be no additional controls. Stone Container shall continue to operate the Paper Mill area and the Power Generation Areas in a manner consistent with minimizing VOC emissions to the extent practicable and in a manner consistent with good air pollution control practices.
6. RACT for the VOC sources within the Non-condensable Gas system shall be Thermal Oxidation. This thermal destruction of VOC's shall be accomplished by venting the Non-Condensable Gases to the Lime Kiln while the Lime Kiln is operating. The Lime Kiln shall be operated and the non-condensable gases shall be vented in a manner consistent with the requirements of the Section 120-02-34 of the State Regulations for the Control and Abatement of Air Pollution. Stone Container shall continue to operate the Lime Kiln and the Non-Condensable Gas system in a manner consistent with minimizing VOC emissions to the extent practicable and in a manner consistent with good air pollution control practices.
7. RACT for the Co-Product Recovery Area with the exception of the Tall Oil Batch Reactor Vent shall be no additional controls. Stone Containe

shall continue to operate the Co-Product Recovery Area in a manner consistent with minimizing VOC emissions to the extent practicable and in a manner consistent with good air pollution control practices.

8. RACT for the Tall Oil Batch Reactor Vent within the Co-Product Recovery Area within the Hopewell Mill shall be a Packed Tower Scrubber. The Tall Oil Batch Reactor Vent Scrubber shall be installed by August, 1996. The VOC removal efficiency of the scrubber shall be 15 percent (%) and shall be confirmed upon stack testing of the emissions point as described in Condition E.9 below.
9. Within 180 days of initial startup of the Tall Oil Batch Reactor Vent Packed Tower Scrubber, the Hopewell Mill shall conduct performance tests using EPA Reference Method 25 or any other Reference Method or equivalent method approved by the Regional Director to determine the VOC removal efficiency of the unit. During these tests, the Hopewell Mill shall be required to operate the Batch Reactor at a minimum of 80% of its maximum rated capacity. Tests shall be conducted and reported and data reduced as set forth in Sections 120-05-03 and 120-06-03 of the SAPCB Regulations, and the test methods and procedures contained in each applicable section or subpart listed in Sections 120-05-0502 and 120-06-0102. The details of the tests are to be arranged with the Regional Director. Three copies of the test results shall be submitted to the Regional Director within 45 days after test completion.
10. During the performance tests of the Packed Tower Scrubber, the Hopewell Mill shall establish and record, using continuous readings, the instantaneous pressure difference across the liquid scrubber media which achieves the maximum VOC reduction efficiency on a mass basis.
11. The Hopewell Mill shall furnish written notification to the Regional Director of the anticipated date of performance tests for the packed tower scrubber and a testing protocol postmarked at least 30 days prior to such date.
12. The scrubber shall operate with a minimum pressure differential as determined during performance testing. The scrubber differential pressure (gas pressure difference between scrubber inlet and outlet) shall be continuously recorded. The Hopewell Mill shall keep records and an explanation provided when the average pressure differential varies from the optimum operating pressure differential by more than two (2) psig, established during the most recent performance test that demonstrated compliance, for a period of time in excess of 5 minutes during the batch reaction steaming phase. This information shall be

maintained at the facility for the most recent five years. Notification of a malfunction shall be given in accordance with the SAPCB Regulations.

13. Stone Container Corporation shall install the new Weak Black Liquor Filter described in Paragraph E.3 above in a manner consistent with the December, 1997 timeframe submitted in the RACT Determination Document dated January 18, 1996. The Hopewell Mill shall submit to the Director, Piedmont Regional Office, information identifying the date of beginning actual construction, the date construction is completed and the date of start-up of the filter within 10 days of these dates.
14. Upon the effective date of this Agreement, The Hopewell Mill shall install or continue to operate those technologies deemed to be Reasonably Available Control Technology in a manner consistent with this Agreement. If Stone Container Corporation plans to modify the control equipment or method in a manner that will result in a decrease in the VOC reduction efficiencies below those defined for the control technologies in paragraphs E.2, E.3, E.6 or E.9 of this agreement, Stone Container Corporation shall submit a request for a revision of this Agreement to the Director, Piedmont Regional Office.
15. The Hopewell Mill shall maintain records of all operating parameters necessary to demonstrate compliance with this Agreement. These records shall be maintained for Tall Oil batch reactor vent packed tower scrubber and associated monitoring equipment for the pressure differential, and shall include, but are not limited to, all of the following:
 - a. a maintenance schedule
 - b. scheduled and unscheduled maintenance records
 - c. inventory of spare parts that are needed to minimize durations of equipment breakdowns
 - d. written operating procedures
 - e. packed tower scrubber differential pressure (instantaneous readings and continuous recorded readings)
 - f. Beginning and ending times of the batch reactor steaming phase.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

16. In order to minimize the duration and frequency of excess emissions due to malfunctions of process or air pollution control equipment required by this Agreement in Conditions E.2, E.3, E.4, E.5, E.6, E.7, and E.8, the Hopewell Mill shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, including dates and duration of any outages. These records shall be maintained on site for a period of five years and shall be made available to the DEQ upon request.
 - b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.
17. At any time in the future, should the Hopewell Mill plan any changes (within the context of the new source review program) to the control technologies or methods described in Conditions E.2, E.3, E.4, E.5, E.6, E.7, and E.8 of this Agreement, the Hopewell Mill shall have the right to apply to the Board for a new source review permit and the Board may consent to such changes, provided such changes will meet all of the new source review permit program regulatory requirements in existence at that time.
18. The Board may modify, rewrite, or amend this Agreement with the consent of the Hopewell Mill, for good cause shown by the Hopewell Mill, 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).
19. So long as this Agreement remains in effect, the Hopewell Mill 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.
20. Failure by the Hopewell Mill 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.

21. Stone Container 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 occurrence beyond Stone Container's control, if Stone Container shows that such occurrences were beyond its control and were not due to a lack of good faith or diligence on the part of Stone Container. 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, Stone Container 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 Stone Container to prevent or minimize the duration of such noncompliance.
22. The Hopewell Mill declares it has received fair and due process in the execution of this Agreement under the Administrative Process Act (§ 9-6.14:1 et. seq.).
23. 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 Stone Container Corporation, 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. Schmidt Jr.
Peter W. Schmidt
Director

STONE CONTAINER CORPORATION

5/9/96
(date) BY: Milton I. Hargrave
Milton I. Hargrave
Plant Manager, Hopewell Mill

COMMONWEALTH OF VIRGINIA
CITY OF RICHMOND

The foregoing instrument was acknowledged before me this 9 day of May, 1996, by Milton I. Hargrave, Plant Manager, Stone Container - Hopewell Mill of Stone Container Corporation, an Illinois Corporation, on behalf of the Corporation.

My commission expires 6-30-98.

Neil Bittman
Notary Public



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