COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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STATE AIR POLLUTION CONTROL BOARD ENFORCEMENT ACTION
A SPECIAL ORDER BY CONSENT
ISSUED TO
Georgia-Pacific Corporation
Title V Permit No. 30389

SECTION A: Purpose

This is a Consent Special Order issued under the authority of Va. Code § 10.1-1307.D, 10.1-1309, and 10.1-1184, and § 10.1-1316.C, between the State Air Pollution Control Board and Georgia-Pacific Corporation ("Georgia-Pacific" or "GP"), for the purpose of establishing an enforceable compliance schedule for Georgia-Pacific's Big Island, Virginia facility.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning 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 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. "Georgia-Pacific" means Georgia-Pacific Corporation, a Georgia corporation certified to do business in Virginia.

7. "Facility" means the Georgia-Pacific facility located at 9363 Lee Jackson Highway in Bedford County, Virginia.

8. "WCRO" means the West Central Regional Office of DEQ, located in Roanoke, Virginia.

9. "Permit" means the Title V operating permit, which became effective on July 1, 2003.

10. "CFR" means the Code of Federal Regulations.

11. "FPA" means the non-binding Final Project Agreement executed on May 31, 2000 by and among Georgia-Pacific, Virginia DEQ, U.S. EPA, and the U.S.D.A. Forest Service, as amended on August 15, 2003.

12. "MACT II" means that portion of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Pulp and Paper Industry, at 40 CFR Part 63 Subpart MM, that addresses hazardous air pollutants ("HAPs") from chemical recovery combustion sources. The MACT II rule became effective on March 13, 2001 and nominally required compliance for existing sources within three years, i.e., by March 13, 2004.

13. "Project XL" means the U.S. EPA program announced on March 16, 1995, under which EPA grants limited regulatory flexibility to approved projects proposed by regulated public entities that provide environmental protection and other benefits superior to those that would be achieved through compliance by conventional means with current regulatory requirements. As applied to the Big Island facility, "Project XL" refers to the black liquor gasification project proposed by Georgia-Pacific and approved by EPA as an alternative means to comply with MACT II.

14. "EPA" means the U.S. Environmental Protection Agency.

SECTION C: Findings of Fact and Conclusions of Law

1. Georgia-Pacific owns and operates a non-sulfur, non-bleaching pulp and paper mill at Big Island, Virginia. The mill produces corrugating medium and linerboard. The mill currently handles the spent ("black") pulping liquor by reducing liquor water content using a conventional multiple-effect evaporation train and combusting the concentrated liquor in two smelters. Exhaust gases from the smelters pass through a venturi scrubber and are then discharged to the atmosphere. As the Big Island Facility is a major source of hazardous air pollutants ("HAPs"), the smelters are subject to the MACT II regulations.

2. In cooperation with, and with the support of, U.S. EPA, U.S. Department of Agriculture Forest Service, Virginia DEQ, U.S. Department of Energy, and other Stakeholders (including the Big Island community and a local environmental group - The Friends of the Pedlar River), Georgia-Pacific proposed, and EPA approved, a Project XL by which Georgia-Pacific proposed to comply with the

MACT II requirements for the Big Island facility through installation and operation of the first commercial-scale black liquor gasification system in the United States. The Project XL stakeholders believed that the new gasification technology would provide significantly better environmental, energy efficiency, and safety benefits than could be achieved through either the construction of a new chemical recovery furnace or the installation of conventional HAP control equipment for the two existing black liquor smelters. The Georgia-Pacific facility and the gasification project are more fully described in the FPA.

3. Because the Georgia-Pacific project involved brand-new technology unproven on a commercial scale, Georgia-Pacific requested certain regulatory flexibility from EPA. On March 26, 2001, EPA granted limited regulatory flexibility regarding the MACT II compliance date in a site-specific MACT II amendment. 66 Fed. Reg.16400 (Mar. 26, 2001). Specifically, EPA provided for (1) a new three-year compliance deadline, to March 1, 2007, in the event Georgia-Pacific declared its attempt to construct and operate the gasification system a failure, and (2) operation of the existing smelters for up to 1500 hours beyond the MACT II compliance date of March 13, 2004, even if Georgia-Pacific deems the gasification system successful, in order to run trials of the new gasification technology on kraft black liquor. The additional three-year compliance period was deemed necessary to allow Georgia-Pacific to construct either a new chemical recovery furnace or conventional control equipment in the event the new gasification technology is deemed a failure.

4. After designing and beginning construction on the new gasification system, Georgia-Pacific encountered significant unavoidable delays in construction that threatened its ability to comply by the existing deadlines in the site-specific rule. Specifically, these delays meant the company anticipated not being able to demonstrate successful operation of the gasification system (or declare the system a failure) until possibly as late as March 1, 2005. Thus, Georgia-Pacific requested from the Department and the Department granted a one-year extension to the MACT II compliance date (up to March 1, 2005) for the Big Island facility, as allowed under section 112(3)(B) of the Clean Air Act and within the Department's delegated authority to implement and enforce the MACT II rule. Accordingly, EPA amended its site-specific rule to allow Georgia-Pacific until March 1, 2005 to declare the gasification system a failure and allow the company three years after such a declaration, or until as late as March 1, 2008, to meet the MACT II standard (68FR46102, August 5, 2003). Hence, under the existing deadlines, Georgia-Pacific must comply with MACT II by March 1, 2005, but if it declares the gasification technology a failure by that date it has until March 1, 2008 to construct or install a new chemical recovery furnace or conventional control equipment for the smelters.

5. Georgia-Pacific has represented to the Department that, since it completed construction on the gasification system in October 2003, additional unexpected, unavoidable technical issues have arisen during commissioning of the new technology that have forced system shutdowns and delayed completion of system commissioning and startup. These issues have included instrumentation and

equipment failures, liquor gun and bed removal system plugging, and poor bed fluidization, which in turn has caused significant heater tube failure. This inability to operate the process in a stable manner has in turn delayed the commissioning of downstream equipment (such as the green liquor filtration system and combustion of Product Gas from the steam reformer in the Reformer Boiler and Pulse Heaters), which is essential to determining the technical feasibility of the overall system.

6. Georgia-Pacific has determined that the delays caused by these unforeseen technical issues make it unlikely that the Facility will be able to operate at full production rate and comply with MACT II utilizing the gasification technology by the current MACT II compliance deadline of March 1, 2005. At the same time, Georgia-Pacific does not believe that the technical hurdles encountered to date threaten the long-term operability of the technology. Hence, the Company believes it would be premature to declare the system a failure by March 1, 2005 and thereby trigger the requirement to pursue conventional controls pursuant to the EPA site-specific rule.

7. Accordingly, Georgia-Pacific has requested that up to two additional years be added to both the March 1, 2005 and March 1, 2008 site-specific MACT II compliance deadlines, to give the Facility time to resolve the ongoing technical issues and gain enough operating experience with the new system to allow an informed success/failure determination. The date for compliance and a success/failure determination for the gasification technology would be moved back two years to March 1, 2007, and the final compliance date in the event Georgia-Pacific declares the gasification system a failure would also be moved back two years until March 1, 2010. Essentially, the substance of the existing site-specific rule would be left unchanged, but the Department would adjust the compliance dates in an enforceable compliance schedule to allow more time for GP to demonstrate success of the new technology.

8. The substantial benefits of the gasification technology over conventional MACT II compliance strategies are explained at length in the EPA site-specific rulemakings, the FPA, and supporting documentation. The Department has no information that would change this evaluation or otherwise diminish the value or benefits of this Project XL. Therefore, the Department continues to support pursuit of the gasification project and finds that its success continues to be in the public interest.

9. Upon review of the information provided by Georgia-Pacific, the Department finds that additional time is necessary in order to allow Georgia-Pacific a reasonable opportunity to demonstrate the long-term operability and feasibility of the gasification technology.

10. The Department has conferred with U.S. EPA regarding the issuance of this Order. Based on its own review of the information provided by Georgia-Pacific and on discussions with the Department, EPA has informed the Department that it does not object to the Department's determination to issue this Order.

11. The Department and Georgia-Pacific do not believe any further extensions will be needed to demonstrate the long-term operability and feasibility of the project.

SECTION D: Agreement and Order

Accordingly, the State Air Pollution Control Board, by virtue of the authority granted it in Va. Code §10.1-1316(C), orders Georgia-Pacific, and Georgia-Pacific agrees, to comply with MACT II pursuant to the compliance schedule described in Appendix A of this Order. Consistent with that schedule, Georgia-Pacific shall make a final determination of the success or failure of the gasification technology by no later than March 1, 2007. If Georgia-Pacific determines that the new technology is successful, Georgia-Pacific shall promptly deactivate the existing smelters and comply with the MACT II requirements by that date, except that it may operate the smelters for such additional time after March 1, 2007 as may be necessary to complete trials of the gasification system on kraft black liquor, within the time limits (i.e., up to 1500 hours total) contained in the site-specific rule for this purpose. If Georgia-Pacific determines on or before March 1, 2007 that the gasification system is a failure, it shall promptly proceed to construct alternative controls on the smelters or install a conventional chemical recovery furnace in time to comply with the MACT II requirements pursuant to the site-specific rule on or before three years from the date of declaring the system a failure and in no event later than March 1, 2010.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of Georgia-Pacific, for good cause shown by Georgia-Pacific, or on its own motion after notice and opportunity to be heard.

2. This Order addresses and resolves only the potential noncompliance described herein. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any subsequent, or subsequently discovered violations; (2) seeking additional actions by Georgia-Pacific to comply with applicable requirements as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein. Georgia-Pacific does not waive any rights it may have to object to any such enforcement action.

3. Georgia-Pacific admits the factual statements and conclusions of law set forth herein.

4. Georgia-Pacific consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

5. Georgia-Pacific 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, except that Georgia-Pacific reserves its right to a hearing or other administrative

proceeding authorized or required by law and to judicial review of any issue of fact or law contained in any subsequent amendment to this Order issued without the consent of Georgia-Pacific. 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 enforce this Order.

6. Failure by Georgia-Pacific 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 the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority. Georgia-Pacific does not waive any rights it may have to object to any such enforcement action by other federal, state, or local authorities arising out of the same or similar facts alleged in this Order.

7. 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.

8. Georgia-Pacific shall comply with all the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Georgia-Pacific shall show that such circumstances resulting in actual or anticipated noncompliance were beyond its control and not due to a lack of good faith or diligence on its part. Georgia-Pacific shall notify the WCRO Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the 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

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

   Failure to so notify the Regional Director within 24 hours of learning of any condition causing or anticipated to cause noncompliance with this Order may be deemed a waiver of any claim of inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.

10. This Order shall become effective upon execution by both the Director or his designee and Georgia-Pacific, whichever is later.

11. This Order shall continue in effect until (i) the Director or Board terminates the Order on its own initiative, in his or its sole discretion upon 30 days written notice to Georgia-

Pacific, (ii) the Director or Board terminates the Order upon request from Georgia-Pacific, the Company having demonstrated that it has satisfactorily completed the tasks set forth in Appendix A hereof, or (iii) Georgia-Pacific notifies the Department, on or before March 1, 2007, that it has declared the gasification system a failure. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Georgia-Pacific from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. By its signature below, Georgia-Pacific voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 11th day of FEBRUARY, 2005.

Steven A. Dietrich
for Robert G. Burnley, Director
Department of Environmental Quality

Georgia-Pacific voluntarily agrees to the issuance of this Order.

By: George Cifelli

Date: February 9, 2005

Commonwealth of Virginia
~~City~~/County of Bedford

The foregoing document was signed and acknowledged before me this 9th day of February, 2005, by George J. Cifelli, who is Vice President, Manufacturing, at the Georgia-Pacific Big Island Mill, on behalf of Georgia-Pacific Corporation.

Robert B. Totropoli
Notary Public

My commission expires: September 30, 2005.

APPENDIX A

COMPLIANCE SCHEDULE

1. Georgia-Pacific shall make a determination of success or failure for the gasification system, consistent with the site-specific rule in 40 CFR §§63.861-63.867, on or before and in no event later than March 1, 2007. If Georgia-Pacific determines that the system is successful, it shall promptly deactivate the smelters and comply in all respects with the MACT II requirements by that date, except that it may operate the smelters for up to 1500 hours after March 1, 2007, consistent with the site-specific rule, to complete trials of the gasification system on kraft black liquor.

2. If Georgia-Pacific determines on or before March 1, 2007 that the gasification system is a failure, Georgia-Pacific shall promptly proceed to construct conventional controls on the smelters or install a new chemical recovery unit in time to comply with all applicable MACT II requirements, consistent with the site-specific rule, on or before three years from the date of declaring the system a failure, and in no event later than, March 1, 2010.

3. Interim Milestones:

    a. By August 1, 2005, Georgia-Pacific shall have operated the gasification system at a level of at least 50% of its design capacity.

    b. By May 1, 2006, Georgia-Pacific shall have operated the gasification system at a level of at least 80% of its design capacity.

4. Georgia-Pacific shall submit an application to amend its Title V operating permit to incorporate a compliance schedule substantially similar to this Appendix A no later than 30 days after the effective date of this Order.

5. Georgia-Pacific shall submit quarterly reports to the WCRO Director, within 30 days of the end of each calendar quarter (i.e., by January 30, April 30, July 30, and October 30), which update the status of work on the gasification system and the progress made toward fulfilling the requirements of this Order during the quarter. The quarterly status reports that Georgia-Pacific currently provides to the U.S. Department of Energy and posts to its public website at <www.gp.com/steamreformer> may be deemed acceptable for this purpose.