

**VOLUNTARY CLEANUP CONTRACT
16-6233-RP**

**IN THE MATTER OF
GEORGIA-PACIFIC RESINS SITE, BERKELEY COUNTY
and
GEORGIA-PACIFIC LLC**

This Contract is entered into by the South Carolina Department of Health and Environmental Control and Georgia-Pacific LLC, pursuant to the Brownfields/Voluntary Cleanup Program, S.C. Code Ann. §§ 44-56-710 through 760, as amended, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601 to 9675, as amended, and the South Carolina Hazardous Waste Management Act (HWMA), S.C. Code Ann. § 44-56-200, with respect to the facility known as the Georgia-Pacific Resins Site ("Site"). The Georgia-Pacific Resins property is located at 1028 Georgia-Pacific Drive, St. Stephen, South Carolina ("Property"). The Property includes approximately 12.07 acres and is within the boundary of the approximately 170 acre Georgia-Pacific complex bounded generally by Old Commissary Road on the north; State Highway 35 on the east; Russell Store Road on the south; and the Lake Moultrie impoundment on the west. The Property is identified by the County of Berkeley as Tax Map Serial Number 0250005031; and a legal description of the Property is attached to this Contract as Appendix A.

DEFINITIONS

1. Unless otherwise expressly provided, terms used in this Contract shall have the meaning assigned to them in CERCLA, the HWMA, and in regulations promulgated under the foregoing statutes, or the Brownfields/Voluntary Cleanup Program.
 - A. "Georgia-Pacific" shall mean Georgia-Pacific LLC. Georgia-Pacific is a Delaware Limited Liability Company with its principal place of business located at 133 Peachtree Street, NE, Atlanta, Georgia.
 - B. "Contamination" shall mean impact by a Contaminant or Hazardous Substance.
 - C. "Contract" shall mean this Responsible Party Voluntary Cleanup

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- Contract.
- D. "Department" shall mean the South Carolina Department of Health and Environmental Control or a successor agency of the State of South Carolina that has responsibility for and jurisdiction over the subject matter of this Contract.
- E. "Hazardous Substance" shall have the same meaning as defined under subparagraphs (A) through (F) of Paragraph (14) of CERCLA § 101, 42 U.S.C. § 9601(14).
- F. "Pollutant" or "Contaminant" includes, but is not limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, including malfunctions in reproduction, or physical deformations, in organisms or their offspring; "contaminant" does not include petroleum, including crude oil or any fraction of crude oil, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) of CERCLA § 101, 42 U.S.C. § 9601, et seq. and does not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality or mixtures of natural gas and such synthetic gas.
- G. "Property" as described in the legal description attached as Appendix A, shall mean that portion of the Site, which is subject to ownership, prospective ownership, or possessory or contractual interest of Georgia-Pacific.
- H. "Response Action" shall mean any assessment, cleanup, inspection, or closure of a site as necessary to remedy actual or potential damage to public health, public welfare, or the environment.
- I. "Site" shall mean all areas where a Hazardous Substance, Pollutant

or Contaminant has been released, deposited, stored, disposed of, or placed, or otherwise comes to be located; "Site" does not include any consumer product in consumer use or any vessel, as defined in CERCLA.

- J. "Voluntary Cleanup" shall mean a Response Action taken under and in compliance with the Brownfields/Voluntary Cleanup Program, S.C. Code Ann. §§ 44-56-710 to 760, as amended.
- K. "Work Plan" shall mean the plan for additional Response Actions to be conducted at the Site as described in Paragraph 3 of this Contract.

FINDINGS

- 2. Based on the information known by or provided to the Department, the following findings are asserted for purposes of this Contract:
 - A. Georgia-Pacific formerly operated a 169.6-acre complex, approximately 1 mile northwest of Russellville, in Berkeley County, South Carolina. During the operational history of the complex, resins were produced on an approximately 12.07-acre portion of the complex.
 - B. Methanol was used as a raw material in the production of resins, and was conveyed to the site by rail as well as by tanker truck. Methanol was stored in a single 500,000 gallon above ground storage tank. Methanol was then conveyed to points of use on the facility via underground piping.
 - C. In December 1991, methanol was discovered seeping through the asphalt pavement in the central portion of the Property. Upon discovery of the leak, the underground piping was taken out of service and rerouted aboveground. A preliminary investigation conducted by Georgia-Pacific consisted of excavation of seven (7)

test pits and sampling of the groundwater that entered the excavations.

- D. At the request of Georgia-Pacific, Integrated Science & Technology (IST) conducted a Phase I assessment between December 1991 and June 1992. This investigation indicated that dissolved phase and possibly free phase methanol contamination existed at the site.
- E. Based on the results of the Phase I assessment, a Corrective Action Plan (CAP) was developed, and submitted to the Department in November 1992. In response to the Department's request for additional data, IST proposed additional site characterization. This additional investigation work identified 1,2 dichloroethane (1,2-DCA) as an additional contaminant of concern. Concentrations of ethylbenzene, toluene, and xylenes were also detected in wells where 1,2-DCA was detected.
- F. In December 1995, Georgia-Pacific submitted a work plan proposing monitored natural attenuation as a remedial option for methanol and 1,2-DCA. Quarterly monitoring began in 1996.
- G. The Department required that a contingency remediation plan be submitted for review and approval in the event that methanol concentrations exceeded the clean-up criterion of 7.5 milligrams per liter (mg/L) at the downgradient compliance point, piezometer PZ-4. The 7.5 mg/L criterion was derived by the Department's toxicologist. Georgia-Pacific subsequently submitted the requested contingency remediation plan stating that "intrinsic biodegradation" in conjunction with an appropriate groundwater monitoring program would adequately protect human health and the environment.
- H. A soil vapor extraction system was installed and activated in May 2001 in part to address the Department's suggestion that active remediation be conducted in the most concentrated portion of the methanol plume. While the soil vapor extraction system renders methanol biodegradation more thermodynamically efficient, its

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primary purpose was to extract accumulated methane from the vadose zone and mitigate the potential for unsafe levels of methane to accumulate in the buildings located at the Site.

- I. Georgia-Pacific submitted an addendum to the CAP in February 2009, which proposed a reduction from quarterly to semiannual sampling, a reduction in the number of wells monitored, and discontinuation of surface water sampling. Continued monitoring of 1,2-DCA was also recommended. The Department disagreed with the recommendation to discontinue surface water sampling, but concurred with the remaining recommendations.
- J. In March 2011, a supplemental investigation was performed to determine the best location for installation of an active remediation system to address the most concentrated portion of the methanol plume. The results of this investigation were presented in the July 2011 Second Semiannual 2010 Groundwater Sampling and Supplemental Plume Investigation Report. This report recommended that monitoring for 1,2-DCA in groundwater be discontinued. The Department concurred with the recommendation to discontinue monitoring for 1,2-DCA, recommended the installation of additional monitoring wells, and requested an updated receptor survey, and updated geologic cross sections. These components were presented in the December 2011 Semiannual Report.
- K. In 2013, the Department requested a plan to delineate the dissolved methanol plume in the area of MW-13, collection of a sample from water supply well GP#2 for analysis of methanol and 1,2-DCA, and a plan to abandon the water supply wells on the Property. Monitoring wells MW-14 and MW-15 were installed in July 2013. Analytical results from samples collected from these wells in June 2014 indicate that they did not contain methanol above the 5.0 mg/L practical quantitation limit.

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- L. In December 2014, Georgia-Pacific submitted the *Semiannual 2014 Ground-Water Sampling Report*. This document indicated that the estimated contaminant mass had been reduced by approximately 99.5%. Approximately 23,000 pounds of methanol was estimated to remain in groundwater.
- M. In 2014 Georgia-Pacific submitted a technical report titled *Alternative Methanol Endpoint Assessment for Groundwater, Georgia Pacific Resins Facility, Russellville, Berkeley County South Carolina*. The report included a conceptual site model that identified as the most likely and most sensitive receptor a theoretical construction worker coming into direct contact with contaminated groundwater in a trench. Based on exposure of this receptor to incidental ingestion of groundwater, the technical report recommended an alternative cleanup goal of 57,000 mg/L methanol in groundwater.
- N. In a meeting with Georgia-Pacific and its consultants on March 12, 2015, the Department indicated that the proposed 57,000 mg/L alternative cleanup standard was not appropriate for closure of the site, as it would require land use restrictions to ensure that there was no use of impacted groundwater. Georgia-Pacific agreed that land use restrictions would be filed with the Register of Deeds.
- O. In June 2015, Georgia-Pacific submitted a technical report titled *Site-Specific Evaluation of Methanol in Groundwater*. The report assumed land use restrictions that prohibit the use of groundwater. Based on construction worker exposure, the technical report recommended an alternative cleanup goal of 19,000 mg/L methanol in groundwater.
- P. The USEPA has calculated a Regional Screening Level (RSL) of 20 mg/L for methanol in tap water. Because site monitoring wells contain methanol in excess of the tap water screening level, the site is not suitable for unrestricted use.

residential properties. Any existing supply wells within this radius shall be sampled and analyzed for methanol by USEPA Method 8015C.

- B. Monitoring - The work plan will include specific details of the groundwater monitoring plan including wells to be monitored, the frequency of sampling, analysis and reporting, and the analytical method(s) to be utilized. Monitoring points shall include both in-plume wells for evaluation of the continued reduction of the remaining contaminant mass and sentinel wells to ensure that contaminants are not migrating away from the parcel under Georgia-Pacific's control. Such monitoring shall continue until the cleanup level for methanol in groundwater is met throughout the site. The cleanup level for methanol in groundwater shall be 20 mg/L. Should monitoring indicate that intrinsic biodegradation is not capable of effectively remediating the remaining groundwater plume, or that contaminants are migrating beyond the plume boundaries indicated in the *First Semiannual 2014 Ground-Water Sampling Report*, the Department reserves the right to require additional response actions as necessary to protect human health and the environment.
- C. Abandonment of Supply Wells – Georgia-Pacific will permanently abandon any existing supply wells on the Property and/or surrounding properties associated with the Complex that are impacted or are no longer required for operation of the facility.

4. Georgia-Pacific shall prepare and submit under separate cover from the Work Plan, a Health and Safety Plan that is consistent with Occupational Safety and Health Administration regulations. The Health and Safety Plan is submitted to the Department for information purposes only. The Department expressly disclaims any liability that may result from implementation of the Health and Safety Plan by Georgia-Pacific.

5. Georgia-Pacific shall inform the Department in writing at least five (5) working days



All final work plans and reports shall include one (1) paper copy and one (1) electronic copy on compact disk.

PUBLIC PARTICIPATION

8. Upon execution of this Contract, the Department will seek public participation in accordance with S.C. Code Ann. § 44-56-740(D), and not inconsistent with the National Contingency Plan. Georgia-Pacific will reimburse the Department's costs associated with public participation (e.g., publication of public notice(s), building and equipment rental(s) for public meetings, etc.).

RESPONSE COST

9. Georgia-Pacific shall, within thirty (30) days of the execution date of this Contract, pay to the Department by certified or cashier's check the sum of four thousand eight hundred sixty-eight dollars and eighteen cents (\$4,868.18) to reimburse estimated past response cost incurred by the Department through April 1, 2016 ("Past Costs") relating to the Site. Georgia-Pacific's payment for Past Costs should be submitted to:

The Department: David Wilkie
South Carolina Department of Health & Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

In accordance with §§ 44-56-200 and 44-56-740, Georgia-Pacific shall, on a quarterly basis, reimburse the Department for Oversight Costs of activities required under this Contract occurring after March 1, 2015. Oversight Costs include, but are not limited to, the direct and indirect costs of negotiating the terms of this Contract, reviewing Work Plans and reports, supervising corresponding work and activities and costs associated with public participation. Payments will be due within thirty (30) days of the Department's invoice date. The Department shall provide documentation of its Oversight Costs in sufficient detail so as to show the personnel involved, amount of time spent on the project for each person, expenses, and other specific costs. Invoices shall be submitted to:

THIS IS CERTIFIED AS A TRUE
AND CORRECT COPY

SIGNATURE



Georgia-Pacific Michael Hassett
Georgia-Pacific LLC
133 Peachtree Street, NE
Atlanta, GA 30303

All of Georgia-Pacific's payments should reference the Contract number on page 1 of this Contract and be made payable to:

The South Carolina Department of Health & Environmental Control

If complete payment of the Past Costs or of the quarterly billing of Oversight Costs is not received by the Department by the due date, the Department may bring an action to recover the amount owed and all costs incurred by the Department in bringing the action including, but not limited to, attorney's fees, Department personnel costs, witness costs, court costs, and deposition costs.

ACCESS

10. The Department, its authorized officers, employees, representatives, and all other persons performing Response Actions will not be denied access to the Site during normal business hours or at any time work under this Contract is being performed or during any environmental emergency or imminent threat situation, as determined by the Department (or as allowed by applicable law). Georgia-Pacific and subsequent owners of the Property shall ensure that a copy of this Contract is provided to any lessee or successor or other transferee of the Property, and to any owner of other property that is included in the Site. If Georgia-Pacific is unable to obtain access from the Property owner, the Department may obtain access and perform Response Actions. All of the Department's costs associated with access and said Response Actions will be reimbursed by Georgia-Pacific.

RESTRICTIVE COVENANT

11. If hazardous substances in excess of residential standards exist at the Property after Georgia-Pacific has completed the response actions required under this Contract, a covenant placing necessary and appropriate restrictions on use of the Property shall be executed and recorded. Upon the Department's approval of the items outlined therein,



the restrictive covenant shall be signed by the Department, representatives of Georgia-Pacific and, if the Property has been sold, the current owner of the Property and witnessed, signed, and sealed by a notary public. Georgia-Pacific or the current owner of the Property shall file this restrictive covenant with the Register of Deeds or Mesne Conveyances in Berkeley County. The signed covenant shall be incorporated into this Contract as an Appendix. A Certificate of Completion shall not be issued by the Department until the restrictive covenant, if required, is executed and recorded. With the approval of the Department, the restrictive covenant may be modified in the future if additional remedial activities are carried out which meet appropriate clean-up standards at that time or circumstances change such that the restrictive covenant would no longer be applicable. The Department may require Georgia-Pacific or subsequent owners of the Property to modify the restrictive covenant if a significant change in law or circumstances requiring remediation occurs. Georgia-Pacific or subsequent owners of the Property shall file an annual report with the Department by May 31st of each year detailing the current land uses and compliance with the restrictive covenants for as long as the restrictive covenant remains in effect on the Property. The report must be submitted in a manner prescribed by the Department.

OBLIGATIONS AND BENEFITS

12. Upon execution of this Contract by the Department, Georgia-Pacific, its signatories, parents, subsidiaries, successors and assigns, shall be deemed to have resolved their liability to the State in an administrative settlement for purposes of, and to the extent authorized under 42 U.S.C. § 9613(f)(2) and § 9613(f)((3)(B), S.C. Code Ann. § 44-56-200, for the work done in completing the Response Actions covered in the Contract including the approved work plan(s) and reports. A thirty (30) day comment period shall be required prior to the Department's execution of the Contract, and shall commence upon publication of the notice of the proposed Contract in the South Carolina State Register.

13. Nothing in this Contract is intended to be or shall be construed as a release or covenant not to sue for any claim or cause of action, past or future, that the Department



the Department's intentional or grossly negligent acts or omissions.

17. Georgia-Pacific and the Department each reserve the right to unilaterally terminate this Contract. Termination may be accomplished by giving a thirty (30) day advance written notice of the election to terminate this Contract to the other party. Should Georgia-Pacific elect to terminate, it must submit to the Department all data generated pursuant to this Contract, and certify to the Department's satisfaction that any environmental or physical hazard shall be stabilized and/or mitigated such that the Site does not pose a hazard to human health or the environment that did not exist prior to any initial Response Action addressing Contamination identified in this Contract.

18. The Department may terminate this Contract only for cause, which may include but is not limited to, the following:

- A. Events or circumstances at the Site that are inconsistent with the terms and conditions of this Contract;
- B. Failure to complete the terms of this Contract or the Work Plan;
- C. Failure to submit timely payments for Past Costs and/or for Oversight Costs as defined in Paragraph 9 above;
- D. Additional Contamination or releases or consequences at the Site caused by Georgia-Pacific, its parents, subsidiaries, successors and assigns;
- E. Providing the Department with false or incomplete information or knowingly failing to disclose material information;
- F. Change in Georgia-Pacific's or its parents', subsidiaries', successors' and assigns', business activities on the Property or uses of the Property that are inconsistent with the terms and conditions of this Contract; or
- G. Failure by Georgia-Pacific to obtain the applicable permits from the Department for any Response Action or other activities undertaken at the Property.

THIS IS CERTIFIED AS A TRUE
AND CORRECT COPY

SIGNATURE



19. Upon termination of the Contract under Paragraph 17 or 18, the covenant not to sue and administrative settlement for purposes of contribution protection shall be null and void. Termination of the Contract by Georgia-Pacific or the Department does not end the obligations to reimburse Oversight Costs already incurred by the Department and payment of such costs shall become immediately due.

20. The signatories below hereby represent that they are authorized to enter into this Contract on behalf of their respective parties.

APPENDIX A
Legal Description of the Property

County of Berkeley
Tax Map Serial Number 0250005031

TRACT A:

ALL THAT TRACT OR PARCEL OF LAND lying and being in Russellville, Berkeley County, South Carolina, and more particularly described as follows:

TO THE TRUE POINT OF BEGINNING, Begin at point of intersection of the center line of a paved private road traversing property of Georgia-Pacific Corporation (the paved area of said private road being 31 feet in width at this point) with the center line of State Road 8-35 (66-foot right-of-way), and run thence in a generally westerly and southwesterly direction along the center line of said private road 2,075 feet, more or less, to a railroad spike in said center line, said railroad spike marking the TRUE POINT OF BEGINNING; and from said TRUE POINT OF BEGINNING as thus established, running thence South 82 degrees, 06 minutes East 60.50 feet to an iron post; running thence South 72 degrees 37 minutes East 113.60 feet to an iron post; running thence South 26 degrees 17 minutes East 10.0 feet to an iron post; running thence South 73 degrees 02 minutes East 246.50 feet to an iron post; running then South 05 degrees 00 minute West 83.50 feet to a point; running thence South 73 degrees 02 minutes East 40.50 feet to point; running thence South 05 degrees 00 minute West 464.50 feet to an iron post; running thence North 80 degrees 02 minutes West 42.8 feet to an iron post; running then South 05 degrees 07 minutes West 64.30 feet to an iron post; running thence South 54 degrees 02 minutes West 176.7 feet to a new iron; running thence South 09 degrees 41 minutes West 173.2 feet to an iron post; running then North 85 degrees 11 minutes West 300.14 feet to a new iron; running then North 78 degrees 11 minutes West 130.70 feet to a railroad spike in the center line of the paved private road hereinabove referred to (the paved area of said road being 21 feet in width at this point); running thence North 14 degrees 42 minutes East along the center line of said road 526.70 feet to a railroad spike; continuing then 41 degrees 11 minutes East along the center line of said road 464.80 feet to the railroad spike at the TRUE POINT OF BEGINNING; said tract being designated Tract "A" and containing approximately 10.63 acres.

TRACT C:

ALL THAT TRACT OR PARCEL OF LAND lying and being in Russellville, Berkeley County, South Carolina, and more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, Begin at point of intersection of the center line of a paved private road traversing property of Georgia-Pacific Corporation (the paved area of said private road being 31 feet in width at this point) with the center line of State Road 8-35 (66-foot right-of-way), and run thence in a generally westerly and southwesterly direction along the center line of said paved private road 2,075 feet, more or less, to a railroad spike in said center line, said railroad spike marking the TRUE POINT OF BEGINNING; running thence South 14 degrees 11 minutes West along the center line of said road 464.80 feet to a railroad spike in said center line; running thence North 85 degrees 34 minutes West 138.80 feet to a new iron; running thence North 14 degrees 27 minutes East 464.00 feet to a new iron; running thence South 86 degrees 03 minutes 136.31 feet to the railroad spike at the TRUE POINT OF BEGINNING; said tract being designated Tract "C" and containing approximately 1.44 acres.

Derivation: Tract A and Tract C being the same property conveyed by Quitclaim Deed dated December 4, 1984 from Georgia-Pacific Corporation to Georgia-Pacific Resins, Inc. and recorded December 12, 1984, in Deed Book 3, Page 1433, Berkeley County, South Carolina records.

TMS: 025-00-05-031