

11-17009

ENVIRONMENTAL COVENANT

International Paper Company ("Grantor") hereby grants an Environmental Covenant ("Covenant") to International Paper Company ("Grantee"), on this 8 day of SEPTEMBER, 2011. The United States Environmental Protection Agency ("EPA" or "Agency") will be the approving Agency.

WHEREAS, Grantor is the owner in fee simple of certain real property located in the City of Richmond, Virginia, the legal description of which is set forth in Schedule A attached hereto and made a part hereof (hereinafter referred to as the "Property").

WHEREAS, this Covenant is an instrument developed and executed with respect to the Property pursuant to the Virginia Uniform Environmental Covenants Act, Title 10.1, Chapter 12.2, §§10.1-1238 - 10.1-1250 of the Code of Virginia.

WHEREAS, the Property is contaminated with various hazardous wastes which include chlorobenzene, 2,4-dinitrotoluene and PCB-aroclor 1260 in soil; and 1,2-dichloroethane, benzene, chlorobenzene and arsenic in groundwater.

WHEREAS, the Property is subject to the Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act ("RCRA") of 1976, and the Hazardous and Solid Waste Amendments ("HSWA") of 1984, 42 U.S.C. §§ 6901 et seq., as more particularly described in the EPA Final Decision and Response to Comments ("FDRTC") issued on December 7, 2010 and attached hereto and made a part hereof as Attachment A.

WHEREAS, in the FDRTC, EPA selected a remedy for the Facility which provides for the monitoring and maintenance of an Asphalt Cap at the Facility as well as implementation of institutional controls which will prohibit the use of groundwater in order to prevent human exposure to contaminants.

WHEREAS, institutional controls must be implemented to prevent human exposure to hazardous wastes by restricting the use of the Property and the activities on the Property, as described in Section II.

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by implementing certain activity and use restrictions on the Property consistent with the institutional controls, described below in Section II, and required by the FDRTC.

WHEREAS, the Administrative Record pertaining to the Environmental Response Project described in this Covenant is located at:

EPA, Region III
Land and Chemicals Division
RCRA File Room
1650 Arch Street
Philadelphia, Pennsylvania 19103

M-1042

NOW, THEREFORE, Grantor hereby grants this Covenant to the Holder (as defined herein), and declares that the Property shall be subject to the following requirements set forth in Sections I through IV below:

I. DEFINITIONS

A. Agency. "Agency" means the EPA pursuant to the Code of Virginia, Chapter 12.2., § 10.1-1238.

B. Asphalt Cap. "Asphalt Cap" means components of the asphalt cap installed on the Property in accordance with the Corrective Measures Study submitted by International Paper to EPA on April 27, 1994 and concurred on by EPA on May 17, 1994. Components of the Asphalt Cap include, but are not limited to, the asphalt cap, curbs, gutters, and a concrete ditch, as depicted in the map set forth and attached hereto and made a part hereof as Figure A.

C. FDRTC. "FDRTC" means the Final Decision and Response to Comments issued by EPA on December 7, 2010 in which EPA selected the remedy for the Facility.

D. Facility. "Facility" means the property located at 3400 Deepwater Terminal Road in Richmond, Virginia as depicted by the property boundary in the map set forth as Figure A which is attached hereto.

E. Holder. "Holder" means International Paper Company, Grantee of this Covenant, pursuant to Code of Virginia § 10.1-1238.

F. Owner. "Owner" means the International Paper Company, its successors and assigns in interest, which owns a fee simple interest in the Property as of the date of execution of this Covenant, and any subsequent person that owns a fee interest in all or any portion of the Property.

E. Industrial use. "Industrial use" shall refer to commercial, manufacturing, public utility, mining or any other activity done to further either the development, manufacturing or distribution of goods and services, including, but not limited to, administration of business activities, research and development, warehousing, storage, shipping, transport, remanufacturing, stockpiling of raw materials, etc. This term does not include schools, nursing homes or other residential-style facilities or recreational areas.

II. RESTRICTIONS

A. Restricted Uses

1. Land use restrictions. There shall be no use of the Property other than "industrial use" as defined above. In no case, however, shall the Property be used for (a) a residential setting for all or any portion of the Property; (b) a

scenario that includes the routine presence of children at the Property; (c) or other similar condition.

2. Ground water use and well restrictions

- a. Ground water beneath the Property shall not be extracted or used for potable or non-potable purposes, except for ground water monitored from monitoring wells until and unless EPA determines in writing that the ground water clean-up levels specified in the FDRTC have been achieved.
- b. No ground water extraction wells shall be installed on the Property, until and unless approved in writing by EPA, or EPA determines in writing that the groundwater clean-up levels specified in the FDRTC have been achieved.
- c. Uses of all or any portion of the Property shall, at a minimum, be restricted to uses that do not impair the efficacy and the protectiveness of the remedy selected by EPA in the FDRTC.

B. Alterations, Improvements and Disturbances

Except as may be approved in writing by EPA, no alteration, improvement, or disturbance in, to and/or about the Property which impairs, invades or disturbs any component of the remedy selected by EPA in the FDRTC will be allowed. Nothing herein shall constitute a waiver of the Owner's obligation to comply with all applicable laws and regulations.

III. REQUIRED ACTIVITIES/ACTIONS

A. Access. Owner agrees to allow the EPA, and/or their authorized agents and representatives, including the Commonwealth of Virginia Department of Environmental Quality ("VADEQ"), access to the Property to inspect and evaluate the continued effectiveness of the remedy selected by EPA in the FDRTC and the Owner's continued compliance with this Environmental Covenant and, if necessary, to conduct additional remediation to ensure the protection of the public health and safety and the environment based upon the remedy selected by EPA in the FDRTC.

B. Owner's Responsibility for Maintenance of the Asphalt Cap

- 1. Owner shall have responsibility for the maintenance of the Asphalt Cap as depicted in Figure A. Owner shall:
 - (a) Monitor and inspect as required under Section III.B.2 of this Covenant and promptly repair any and all Asphalt Cap

deficiencies which shall include, but is not limited to, maintaining the asphalt cap to prevent deterioration, performing repairs of any cracks, settlement, or separation due to weathering or heavy truck traffic use; and

- (b) perform seal coating of the Asphalt Cap at least every five (5) years unless the inspections required by III.B.1(a), above, reveal that more frequent application is necessary.
- 2. In order to meet the inspection obligation outlined in Section III.B.1 of this Covenant, Owner shall inspect the Asphalt Cap on at least an annual basis, and provide a written report of the Asphalt Cap status to EPA and VADEQ within thirty (30) calendar days of the final inspection.
- 3. All such maintenance and repair shall be conducted at Owner's sole cost and expense.

C. Notice to Transferees

- 1. In the event of any change in ownership or control of any portion of the Property, Owner shall notify EPA in writing at least thirty (30) calendar days in advance of such change in which such notice shall include the name(s), address(es) and telephone number(s) of the grantee(s) or transferee(s)-in-interest, and shall provide a copy of this Covenant to the transferee or grantee prior to finalizing any agreement for transfer. Owner shall include in all leases, grants, and other written transfers of interest in all or any portion of the Property a provision expressly requiring all transferees thereof to take the Property subject to the restrictions and obligations contained herein and to comply with all, and not to violate any of the conditions of this Covenant. Notwithstanding the foregoing, the lack of such a written agreement shall not serve to release such holders from the obligations to comply with the provisions of this Covenant. Nothing contained in this Paragraph shall be construed as limiting any obligation of Owner to provide any notice required by any law, regulation or order of any governmental body.

IV. GENERAL PROVISIONS

- A. Restrictions to Run with the Land. This Covenant runs with the land pursuant to Section 10.1-1241, and is perpetual unless amended or terminated pursuant to Sections 10.1-1245 and 10.1-1246 of the Commonwealth of Virginia Uniform Environmental Covenant Act.
- B. Binding Effect. All the terms, covenants and conditions of this Covenant shall be binding on the Owner during its period of ownership and/or possession of the Property and the Owner's successors and assigns and each Owner and any other

party entitled to possession or use of the Property during its period of ownership or possession.

- C. Access to Property by Owner. No provision in this Covenant shall be deemed to limit in any way the International Paper Company's right to retain, through contract, access rights to the Property from any subsequent owner of the Property in Order to fulfill this Covenant's obligations.
- D. Recordation. Within ten (10) business days after the date of the Agency's required signature upon this Covenant, Grantor shall file this Covenant in the county clerk's office in each county that contains any portion of the real property subject to this Covenant. Within that time period, the Owner also shall send a file-stamped copy to the Agency and to VADEQ at the addresses specified in Section IV.I, below.
- E. Effective Date: Within 30 days after the date of the Agency's approval, the Owner(s) shall implement the restrictions and required activities described in Sections II and III, above.

- F. Incorporation into Deeds and Leases. Each instrument hereafter conveying any interest in the Property or any portion of the Property shall contain a notice of the restrictions and requirements set forth in this Covenant. This notice shall be substantively in the following form:

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT, DATED _____, 2011, RECORDED IN THE OFFICIAL RECORDS OF THE RICHMOND COUNTY CLERK'S OFFICE IN DEED BOOK ____, Page _____.
- G. Compliance Enforcement. The terms of this Covenant may be enforced by EPA, as the Agency, or any other person identified in the Uniform Environmental Covenants Act, Title 10.1, Chapter 12.2, Sections 10.1-1247 of the Code of Virginia, including the City of Richmond, Virginia, in accordance with applicable law. Failure to timely enforce compliance with this Covenant or the use or activity limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Covenant shall restrict EPA or the City of Richmond, Virginia, from exercising any authority under applicable law.
- H. Termination or Amendment. This Environmental Covenant may only be terminated or amended in accordance with Virginia Uniform Environmental Covenants Act, Title 10.1, Chapter 12.2, §§10.1-1245 - 10.1-1246 of the Code of Virginia.
- I. Notices. Any document or communication required to be sent to the EPA under the Covenant shall be sent to:

Director, Land and Chemicals Division
 United States Environmental Protection Agency
 Region III
 1650 Arch Street
 Philadelphia, PA 19103
 (215) 814-3143

Any document or communication required to be sent to the VADEQ under the Covenant shall be sent to:

Ms. Jutta Schneider
 Virginia Department of Environmental Quality
 629 E. Main Street
 Richmond, VA 23219
 Phone: (804) 698-4099

Any document or communication required to be sent to the International Paper Company under this Covenant shall be sent to:

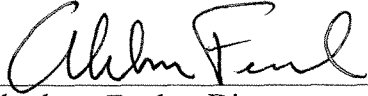
Ryan Dahl
 Sr. Counsel, EHS&S
 International Paper Company
 6400 Poplar Avenue
 Memphis, TN 38197
 Phone: (901) 419 4433

- J. No Property Interest Created in EPA. This Covenant does not in any way create any interest by EPA in the Property which is subject to the Covenant. Furthermore, the act of approving this Covenant does not in any way create any interest by EPA in such Property.
- K. Multiple Counterparts. This Covenant may be executed in multiple counterparts, each of which when so executed shall be deemed to be originals and together shall constitute but one and the same instrument.

Attachment A: Final Decision and Response to Comments, dated December 7, 2010.

Figure A: Map of Asphalt Cap

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III**



Abraham Ferdas, Director
Land and Chemicals Division

Date: 9/26/11

INTERNATIONAL PAPER COMPANY

Roger M. Schumma

[Name]

[Title]

REMEDATION PROGRAM MGR.

Date: *September 8, 2011*

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF Shelby) SS:

The foregoing instrument was acknowledged before me this 8th day of September, 2011, by Roger H. Schomer, who acknowledged himself/herself to be the designated representative [Title] of the International Paper Corporation whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

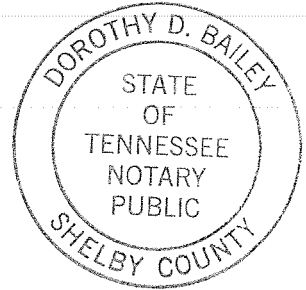
In witness whereof, I hereunto set my hand and official seal.

Dorothy D. Bailey
Notary Public

Notary registration number: N/A

My commission expires: _____

My Commission Expires May 30, 2012



Attachment A



UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

FINAL DECISION AND RESPONSE TO COMMENTS
International Paper, Richmond Gravure Facility

RICHMOND, VIRGINIA

EPA ID NO. VAD046979498

December 7, 2010

TABLE OF CONTENTS

SECTION	PAGE
I. Introduction.....	1
II. Final Decision.....	1
III. Facility Background.....	2
IV. Summary of Environmental History	2
V. Evaluation of EPA's Final Decision.....	4
VI. Institutional Controls.....	5
VII. Environmental Indicators.....	6
VIII. Financial Assurance.....	6
IX. Public Comments and EPA Responses	6
X. Declaration	7

Figure 1 – Site Location

I. INTRODUCTION

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) in connection with the International Paper, Richmond Gravure Facility, located at 3400 Deepwater Terminal Road in Richmond, Virginia (hereinafter referred to as the Facility).

The Facility is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 *et seq.* The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and addressed releases of hazardous waste and hazardous constituents that have occurred at their property.

In Section I.B of the SB, captioned 'Proposed Decision', EPA described the proposed final remedy as "...the implementation of, compliance with and maintenance of institutional controls..." In Section V. of the SB, captioned 'Institutional Controls', EPA noted as follows: "The Environmental Covenant would require International Paper to protect the integrity of the asphalt cap as well as provide monitoring and maintenance of the cap." EPA has not modified or changed the remedy from that proposed in the SB, but is clarifying herein that monitoring and maintenance of the asphalt cap is a component of the Final Remedy.

EPA reviewed all available Facility data and it has now determined that the final remedy identified in Section II. FINAL DECISION below will be protective of human health and the environment.

II. FINAL DECISION

EPA has selected monitoring and maintenance of the asphalt cap and the implementation of, compliance with and continued maintenance of institutional controls as the final remedy for the Facility. This final remedy is appropriate at this Facility because protection of human health and the environment has been achieved, and monitoring and maintenance of the asphalt cap and institutional controls (ICs) are necessary for long-term protection. The institutional controls are detailed in Section VI, below. The selected final remedy for the Facility calls for the monitoring and maintenance of the asphalt cap and the implementation of institutional controls to prohibit the use of groundwater in order to prevent human exposure to contaminants since contamination will remain in the groundwater at the Facility that exceed maximum contaminant levels (MCLs), promulgated by EPA pursuant to the Safe Drinking Water Act 42 U.S.C. §§ 300f *et seq.*, and codified at 40 C.F.R. Part 141. EPA has determined that the final remedy protects human health and the environment and therefore is consistent with EPA's nine criteria for remedy selection, which are discussed in the Corrective Action Advanced Notice of Proposed Rulemaking, 61 Fed. Reg. 19432 (May 1, 1996) and set forth in Section IV (Evaluation of EPA's Proposed Decision) in the SB. The final remedy will be implemented through an enforceable mechanism such as a permit, order or an Environmental Covenant pursuant to the Virginia Uniform Environmental Covenants Act, Title 10.1, Chapter 12.2, Sections 10.1-1238-10.1-1250 of the Code of Virginia

("Environmental Covenant").

This Final Decision is supported by the information set forth in the Administrative Record (AR).

III. FACILITY BACKGROUND

The Facility is located at 3400 Deepwater Terminal in Richmond, Virginia. The Facility is bordered by industrial properties to the north, south and west. The James River and its floodplain border the Facility to the east.

The Facility was formerly used as a warehouse in the late 1960s. Printing operations started in 1969, where folding cartons were printed until 2000. The Facility is owned by International Paper, Richmond Gravure and is divided into two parcels, the north parcel which consists of 16 acres and the south parcel which consists of 36 acres. These parcels were acquired by International Paper in 1979 and 1988, respectively. A portion of the Facility located to the east and south of the plant building was used as a landfill from 1970 to 1979. The Facility includes a large building/warehouse, a paved parking area, undeveloped fields, and a wooded area to the east of the plant building. In 2004, the south parcel was sold by International Paper to Deepwater Holdings Properties LLC. The Facility is located in an area that is zoned for industrial uses. (See Figure #1)

Prior to International Paper, Richmond Gravure's acquisition of the Facility, waste generated during construction of Interstate 95 and the City of Richmond sanitary sewer line was disposed of on the Facility property to the east and south of the plant building. The majority of the disposal activities occurred in the area east of the plant building. A landfill was constructed in this area to fill in the hillside located east of the plant building. EPA has no evidence indicating who constructed or placed waste in the landfill.

IV. SUMMARY OF ENVIRONMENTAL HISTORY

In September 1985 during a subsurface investigation conducted by the Facility, strong chemical odors and fiberglass materials were found in the soil. Soil sampling in December 1985 showed the presence of toluene, chlorobenzene and ethylbenzene contamination. In April 1986, during a Virginia Department of Waste Management (DWM) site visit, exposed debris and drums were found along the slope and toe of the landfill. Following this visit the DWM conducted a Preliminary Assessment to determine whether the Facility should be included on the National Priorities List (NPL). The Preliminary Assessment included soil and surface water sampling. The results of the sample analyses confirmed the presence of several chemical compounds in soil which included toluene, ethylbenzene, chlorobenzene, methylene chloride, acetone, 2-butanone, total xylenes and carbon disulfide. Acetone, 2-butanone, methylene chloride and 1,1-dichloroethane were found in surface water.

In June 1992, a RCRA Facility Investigation was performed by International Paper, Richmond Gravure with EPA oversight under Region III's RCRA Corrective Measures Pilot

Program (Pilot Program) for voluntary response actions, now known as the Region's Facility Lead Corrective Action Program. In March, April and October, 1993, the Facility installed and sampled shallow and deep monitoring wells, collected surface water and sediment samples, and collected soil samples from deep and surficial soil borings. Contaminants found in soil in March 1993 which exceeded the soil screening level (SSL) and contaminants found in shallow perched groundwater in October 1993 which exceeded their respective MCLs are described in the charts immediately below:

Soil, Units ug/kg – microgram/kilogram

Contaminant	SSL, ug/kg	Max Level, ug/kg
Chlorobenzene	62	260
2,4-Dinitrotoluene	0.29	520
PCB – Aroclor	24	791,000

Groundwater, Units ug/L – microgram/liter

Contaminant	MCL, ug/L	ug/L
1,2-dichloroethane	5	14
Benzene	5	800
Chlorobenzene	100	5,500
Arsenic	50	71.6

On April 27, 1994, the Facility submitted a RCRA Facility Investigation Report (RFI) and a Corrective Measures Study Report (CMS) to EPA pursuant to the Pilot Program described above. The RFI identified unacceptable risks for PCBs in surface soils and volatile organic compounds in groundwater for an industrial risk scenario. The CMS Report evaluated alternatives for corrective action for the landfill. These alternatives included no further action, installation of a clay cap, installation of an asphalt cap, excavation and offsite disposal of contaminated soils, in-situ stabilization/ solidification of contaminated soils, and groundwater monitoring. An asphalt cap on the landfill with a 5-year ground-water monitoring plan was the recommended corrective measure.

On May 17, 1994, EPA issued a letter to the Facility that concurred with the recommendations from the CMS report and requested that the Facility install the asphalt cap and implement the 5-year groundwater monitoring program to reduce the risk of human exposure from contaminants in the landfill from the Facility. Subsequently, in December 1994, an asphalt cap was installed on the landfill at the Facility. From 1994 through 2000, the 5-year ground-water monitoring program was conducted at the Facility. On June 29, 2000, International Paper, Richmond Gravure submitted a Corrective Action Summary Report to EPA.

Based on the results of the 5-year monitoring program EPA determined that VOCs and PCBs at the Facility were not migrating in groundwater from the landfill. In a letter to International Paper dated October 22, 2002, EPA stated that Human Exposure and Groundwater Environmental Indicators had been met and that EPA would require annual groundwater

monitoring at the Facility and an annual inspection of the cap to document its integrity.

VOC detections (benzene and chlorobenzene) above MCLs were found in one well screened in the shallow perched water zone within the landfill wastes. The deeper alluvial well in this area which was screened at the base of the alluvial aquifer did not show any contamination. These results indicated that the groundwater contamination is remaining in the perched water zone in contact with landfill wastes, but is not migrating to the underlying alluvial aquifer. The asphalt cap is minimizing infiltration and is preventing direct human contact with soil. There is currently no unacceptable risk for the industrial land use scenario.

In February 2010, EPA requested that International Paper conduct additional groundwater and seep sampling to verify that groundwater contamination exists only within the limits of the landfill and is not migrating to the underlying alluvial. This sampling took place during May 2010 at which time it was determined that VOC concentrations continue to decrease over time in the shallow perched groundwater and continue to not be detected in the deeper groundwater indicating that the asphalt cap serves as an effective barrier and prevents human contact with contaminants and penetration of surface water to underlying waste.

V. EVALUATION OF EPA'S FINAL DECISION

This section provides a description of the criteria EPA uses to evaluate remedies under the Corrective Action Program. The criteria are applied in two phases. In the first phase, EPA evaluates three criteria, known as Threshold Criteria. In the second phase, EPA sometimes uses seven balancing criteria to select among alternative solutions, if more than one is proposed. The Facility has demonstrated that the current conditions at the Facility property meet the threshold criteria established by EPA. Because EPA has not selecting among alternatives, a complete evaluation of the balancing criteria was not necessary.

The following is a summary of EPA's evaluation of the Threshold Criteria:

1. **Protect Human Health and the Environment** - The final remedy protects human health and the environment from exposure to contamination. EPA's final remedy meets this standard for current and anticipated land use. Activities undertaken have already resulted in protection of human health and the environment, and will continue to do so. The human health exposure pathway was removed when the asphalt cap was installed.

Based on the data gathered under the groundwater monitoring plan, the installation of the asphalt cap has ensured that the VOCs present in the perched groundwater within the landfill are not migrating to the aquifer below the landfill, and the groundwater monitoring plan has verified this. The cap, monitored and maintained, will continue to assure that human health and the environment are being protected.

2. **Achieve Media Cleanup Objectives** - EPA's final remedy meets the appropriate cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). The north parcel of the Facility is currently as a warehouse for storing

cardboard packaging materials; the south parcel is not used by International Paper but is used as an automobile auction site. The anticipated future land use for both parcels is industrial.

3. Remediating the Source of Releases - In all remedy decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes and/or hazardous constituents that may pose a threat to human health and the environment. Since this Facility is no longer operating as a gravure facility but instead is being used as a warehouse for cardboard packaging materials, there is no continuing source of releases. Additionally data obtained from the 5- year monitoring plan have shown that there is no discharge of contaminants from the landfill.

VI. INSTITUTIONAL CONTROLS

Institutional Controls (ICs) are generally non-engineered mechanisms such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of a remedy. Under this final remedy, some concentrations of contaminants will remain in the groundwater and soil at the Facility above levels appropriate for residential and domestic uses. As a result, the final remedy will require the Facility to implement ICs in order to restrict use of the Facility property and groundwater to prevent human exposure to contaminants while such contaminants remain in place.

The ICs will be instituted through an enforceable mechanism such as a permit, order or an Environmental Covenant, pursuant to the Virginia Uniform Environmental Covenants Act, Title 10.1, Chapter 12.2, Sections 10.1-1238-10.1-1250 of the Code of Virginia ("Environmental Covenant"), will be recorded with the Clerk's Office of the Circuit Court of Richmond. If the mechanism is to be an Environmental Covenant, International Paper will be required to provide a coordinate survey as well as a metes and bounds survey for the closed surface impoundments and the Facility boundary. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Goggle Earth or Goggle Maps. A clerk-stamped copy of the Environmental Covenant will be sent to EPA and VDEQ within sixty (60) calendar days of recordation.

The Environmental Covenant would require International Paper to protect the integrity of the asphalt cap as well as provide monitoring and maintenance of the cap. The Environmental Covenant will set forth a prohibition on use of groundwater in order to prevent human exposure to contaminants since contaminants will remain in the groundwater at the Facility that exceed MCLs.

If the Facility fails to meet its obligations under an enforceable mechanism, or EPA, in its sole discretion, deems that additional ICs are necessary to protect human health or the environment, EPA has the authority to require and enforce additional ICs, such as an order or a permit.

VII. ENVIRONMENTAL INDICATORS

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. The Facility met these indicators on August 5, 2002. EPA did a final Environmental Indicator evaluation on January 29, 2010.

VIII. FINANCIAL ASSURANCE

Since the landfill cap has already been installed, financial assurance will not be required as the cost for the monitoring and maintenance of the cap will be minimal.

IX. PUBLIC COMMENTS AND EPA RESPONSES

On July 14, 2010, EPA issued a Statement of Basis (SB) in which EPA proposed the final remedy for the Facility. EPA held a thirty (30)-day public comment period which began on July 21, 2010, and ended on August 21, 2010. All of the comments received by EPA during the public comment period were carefully reviewed by EPA, and EPA's responses are set forth in this Section IX. PUBLIC COMMENTS AND EPA RESPONSES. None of the comments received warrant a modification or change to the Final Remedy as discussed above.

Comments received in writing:

Comment 1: Title and Section I.A. Facility Name

In the title of the document, the site is referred to as the "International Paper Company" site. To be accurate, the title should reference the "International Paper, Richmond Gravure Facility" as this is the way it has been referenced in all previous EPA documents. This comment also applies to Section I.A., paragraph 1, line 2, where it should be written as, "The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) in connection with the International Paper, Richmond Gravure Facility, located at 3400 Deepwater Terminal Road in Richmond, Virginia (hereinafter referred to as the Facility)."

EPA Response:

EPA agrees with the comment and has incorporated this change in the Final Decision.

Comment 2: Section II. Facility Background

In the last sentence of paragraph 3, it would be more accurate to state, "A landfill was constructed in this area by others to fill in the hillside located east of the plant building. International Paper never used the landfill for waste disposal."

EPA Response:

EPA disagrees with the comment since based on historical information EPA does not have any evidence indicating who placed waste in the landfill.

Comment 3: Section III. Summary of Environmental History

Paragraph 2, sentence 2 does not list the correct sampling dates for the results shown in the accompanying date table. Sentence 2 should be revised to state, "In March, April and October 1993, the Facility installed and sampled shallow and deep monitoring wells, collected surface water and sediment samples, and collected soil samples from deep and surficial soil borings." In addition, sentence 3 of this same paragraph discusses the contaminants found in soil and groundwater at concentrations above soil screening levels (SSLs) and maximum contaminant levels (MCLs). As certain contaminants were only detected in the shallow, perched groundwater at concentrations above the MCLs, sentence 3 should be revised to state, "Contaminants found in soil in March 1993 which exceeded the soil screening level (SSL) and contaminants found in shallow perched groundwater in October 1993 that exceed the respective maximum contaminant levels..."

The data table that follows paragraph 2 includes concentrations of soil sample results detected above the SSL for samples collected in March 1993, however the table is not correct. In March 1993, chlorobenzene was detected at a concentration of 260 ug/kg and not 5,500 ug/kg as presented in the table. In addition, incorrect units are listed for PCB- Aroclor 1260 results of 791 (units should be milligrams/kilogram [mg/kg] not ug/kg). Finally, as the SSL concentrations have changed over the years, it is unclear as to which SSLs are presented. In light of these comments, it is our understanding, based on an email from Ms. Estena McGhee on July 27, 2010, this data table will be corrected in the final Statement of Basis and a clarification of the SSLs will be provided. The clarification should also include the type of SSL being compared to (i.e., industrial standard, migration to groundwater standard, etc.).

EPA Response:

EPA agrees with the comment and has incorporated these changes in Section IV. SUMMARY OF ENVIRONMENTAL HISTORY, above.

Comment 4: Section III. Summary of Environmental History

It would be more accurate and consistent with previous descriptions of the landfill location, to state the following in paragraph 4, sentence 2, "Subsequently, in December 1994, an asphalt cap was installed on the landfill located to the east of the plant building." In addition, the next sentence would be more accurate if written as follows, "From December 1994 through March 2000, the 5-year groundwater monitoring program was conducted at the Facility."

EPA Response:

EPA has considered the comment but has concluded that the facts as recited in the SB are correct.

Comment 5: Section III. Summary of Environmental History

In paragraph 7, the following sentence is not accurate, "The sampling took place in May 2010 at which time it was determined that there have been no further changes." The recent sampling data

continues to show that VOC concentrations are decreasing over time (chlorobenzene and benzene concentrations are significantly lower than in 1999) due to the presence of an asphalt cap and lack of infiltration of precipitation. Therefore, it would be more accurate to state the following. "The sampling took place in May 2010 at which time it was determined that VOC concentrations continue to decrease over time in the shallow perched groundwater and continue to not be detected in the deeper groundwater indicating that the asphalt cap is an effective remedy."

EPA Response:

EPA agrees with this comment and notes that the asphalt cap serves as an effective barrier thereby preventing human contact with the contaminants. The appropriate changes have been made in the Final Decision.

Comment 6: Section IV. Evaluation of EPA's Proposed Decision

In subpart 2, Achieve Media Cleanup Objectives, the second sentence is not correct ("The north parcel of the Facility is currently unused and the south parcel is used for an automobile auction."). The following statement would be more accurate, "The north parcel of the facility is currently used as a warehouse for storing cardboard packaging materials; the south parcel is not owned by International Paper and is used as an automobile auction site."

In subpart 3, Remediating the Source of Releases, the second sentence is not correct ("Since this facility is no longer operating, there is no continuing source of releases."). It would be more accurate to state the following, "Since the site is no longer operating as a gravure facility but instead is being used as a warehouse for cardboard packaging materials, there is no continuing source of releases."

EPA Response:

EPA agrees with this comment and has incorporated this change in the Final Decision.

Comment 7: Section V. Institutional Controls

The second sentence of paragraph 2 is missing a word. It should read as follows, "If the mechanism is to be an Environmental Covenant, International Paper will be required to provide a coordinate survey as well as a metes and bounds survey for the closed surface impoundments and the Facility boundary."

EPA Response:

EPA agrees with this comment and has incorporated this change.

The Administrative Record contains all the information considered by EPA for the Final Decision for this Facility. To receive a copy of the Administrative Record, contact Ms. Estena McGhee at the address below:

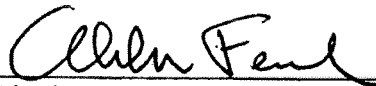
U.S. EPA Region III

1650 Arch Street
Philadelphia, PA 19103
Contact: Ms. Estena McGhee (3LC20)
Phone: (215) 814-3433
Fax: (215) 814 - 3113
Email: mcghee.estena@epa.gov

X. DECLARATION

Based on the Administrative Record, I have determined that the Final Remedy as set forth in this Final Decision is appropriate and will be protective of human health and the environment.

Date: 12/7/10

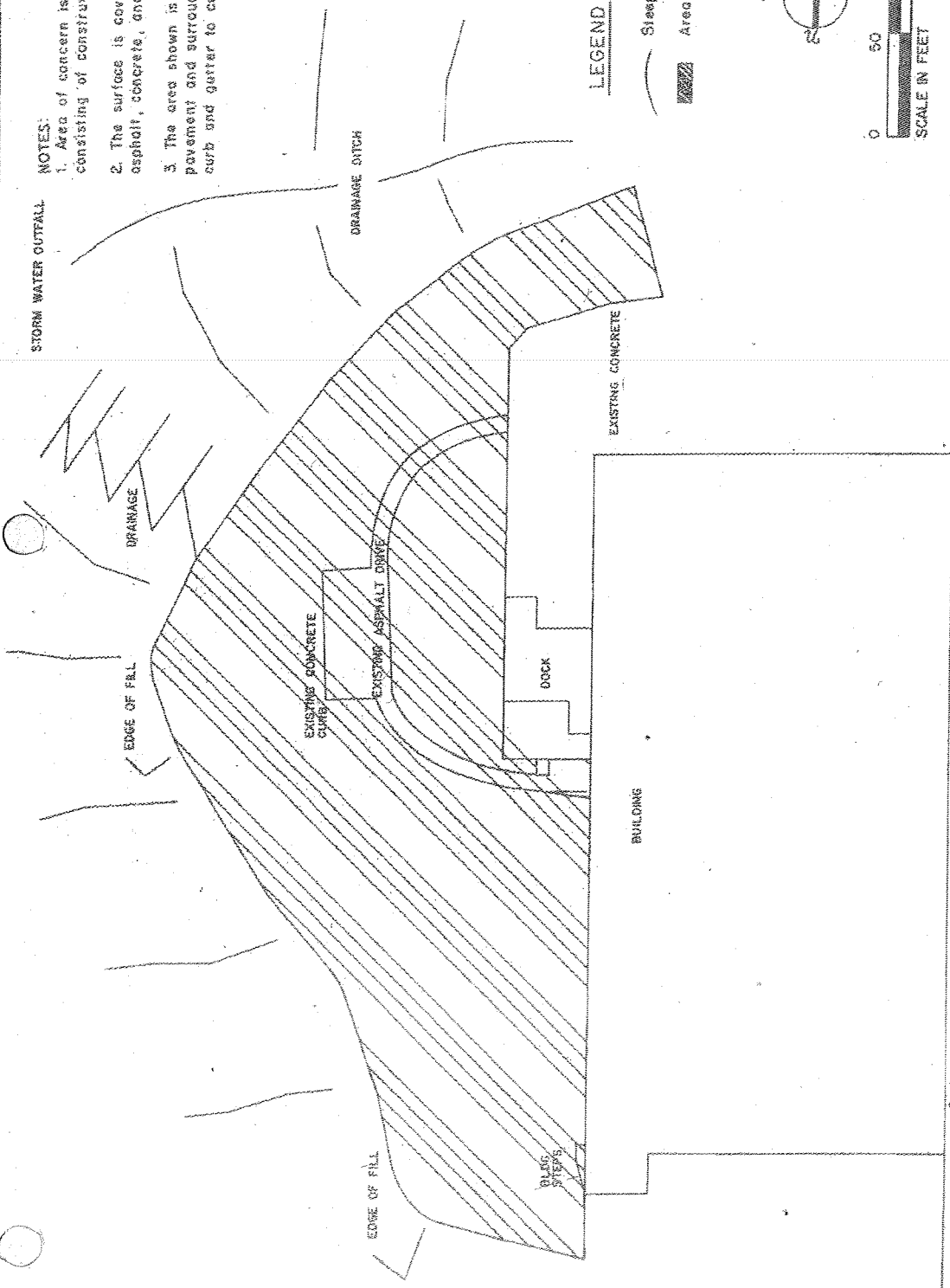


Abraham Ferdas, Director
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III

STORM WATER OUTFALL

NOTES:

- 1. Area of concern is an abandoned landfill consisting of construction waste and other materials.
- 2. The surface is covered with compacted gravel, asphalt, concrete, and soil.
- 3. The area shown is to be capped with an asphalt pavement and surrounded with standard concrete curb and gutter to control storm water runoff.



"AS-BUILT"

SITE PLAN - EXISTING CONDITIONS
RICHMOND GRAVURE
RICHMOND, VIRGINIA

DOMINION
PAVING & SEALING, INC.
18200 HULL STREET ROAD
MOSELEY, VIRGINIA 23120
(804) 739-4150

Figure A

INSTRUMENT # 11 - 17009
RECORDED IN THE CLERK'S OFFICE OF
CITY OF RICHMOND ON

OCT - 5 2011 AT 10:42

BEVILL M. DEAN, CLERK

BY: *J. R. Crew* DEPUTY CLERK