

Hopewell UECA



0047

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax: 804-698-4019 - TDD (804) 698-4021

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

July 12, 2017

Mr. Kraig A. Kunkemoeller
Ashland Specialty Group
5200 Blazer Pkwy
Dublin, OH 43017

RE: Uniform Environmental Covenant (UECA)
Ashland Specialty Group for Property located at 1111 Hercules Road, Hopewell, VA

Dear Mr. Kunkemoeller:

Enclosed you will find the executed Environmental Covenant (UECA) for the above referenced Property. The Covenant must be recorded within 90 days at the Circuit Court for each locality wherein the Property is located.

Upon recordation, a Court file-stamped copy of the UECA must be sent to the chief administrative officer of each locality in which the property is located as well as a file copy to the Department of Environmental Quality.

Should you require additional assistance, please contact me at 804-698-4014.

Sincerely,

A handwritten signature in black ink, appearing to read "Michelle R. Payne".

Michelle R. Payne
UECA Coordinator
Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, VA 23218

Enc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

0048

July 3, 2017

Michelle Payne
ARARs and UECA Coordinator
Department of Environmental Quality
629 E. Main Street
Richmond, VA 23219

RE: Ashland Inc. – Hopewell Plant UECA Environmental Covenant (Formerly Hercules Hopewell)

Dear Ms. Payne:

The attached UECA Environmental Covenant for the Ashland Incorporated – Hopewell Plant (EPA ID# VAD003121928) has been signed by the Facility and EPA. Please sign and move forward with recording the covenant.

Sincerely,

A handwritten signature in black ink that reads "John Hopkins".

John Hopkins
Remedial Project Manager



Prepared by:

Groundwater & Environmental Services, Inc.
1350 Blair Drive, Suite A
Odenton, MD 21113

Tax Map Nos.: 048-0204 and 048-0206
EPA Site ID # VAD 003 121 928

UECA ENVIRONMENTAL COVENANT

This environmental covenant is made and entered into as of the 3rd day of Aug., 2017, by and between **Ashland Specialty Ingredients G.P.** (formerly known as Aqualon Company), whose address is 5200 Blazer Pkwy, Dublin, OH 43017 (hereinafter referred to as the "Grantor" or "Owner") and **Ashland Specialty Ingredients G.P.**, (hereinafter referred to as the "Grantee" or "Holder") whose address is 5200 Blazer Pkwy, Dublin, OH 43017. The United States Environmental Protection Agency – Region III, whose address is 1650 Arch Street, Philadelphia, PA 19103 (hereinafter referred to as the "Agency") also joins in this environmental covenant.

This environmental covenant is executed pursuant to the Virginia Uniform Environmental Covenants Act, § 10.1-1238 et seq. of the Code of Virginia (UECA). This environmental covenant subjects the Property identified in Paragraph 1 to the activity and use limitations in this document.

1. Property Affected

The property affected (Property) by this environmental covenant is located at 1111 Hercules Road, Hopewell, Virginia, and is further described as follows:

Tract # 1 and Tract #2, in the City of Hopewell, Virginia, on the eastern side of Hercules Road and north of Cattail Creek and Bailey's Creek and more particularly described with reference to a plat entitled "Boundary and Site Survey for Bank of America, N.A., Mortgage 1111 Hercules Rd., Hopewell, Virginia 23860" (**EXHIBIT A**), made by Hunt & Proffitt Incorporated, dated October 28, 2008, revised February 19, 2009, and more particularly described as follows:

TRACT #1:

BEGINNING AT A POINT AT THE INTERSECTION. OF THE EASTERLY RIGHT OF WAY OF HERCULES ROAD AND THE SOUTHERLY RIGHT OF WAY OF SEABOARD AIR LINE RAILROAD COMPANY AT A PIPE FOUND; THENCE WITH SAID RAILROAD RIGHT OF WAY SOUTH 67°13'09" EAST 4150.00 FEET TO AN IRON PIN SET; THENCE SOUTH 22°46'51" WEST 26.57 FEET TO AN IRON PIN SET; THENCE SOUTH 67°13'09" EAST 1947.86 FEET TO A CONCRETE MONUMENT FOUND; THENCE NORTH 22°46'51 " EAST 100.00 FEET TO A CONCRETE MONUMENT FOUND; THENCE LEAVING SAID RIGHT OF WAY SOUTH 67°13'09"

EAST, PASSING AN IRON PIN SET AT 114.82 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF APPROXIMATELY 175 FEET TO THE MEAN LOW WATER LINE OF BAILEY'S CREEK; THENCE WITH THE MEAN LOW WATER LINE OF BAILEY'S CREEK AND CATTAIL CREEK FOR APPROXIMATELY 10,606 FEET TO A POINT, SAID POINT BEING SOUTH 22°55'01" WEST 30 FEET FROM AN IRON PIN SET; SAID IRON PIN BEING THE TERMINATION OF A TRAVERSE LINE BY WHICH THE MEAN LOW WATER LINE OF BAILEY'S CREEK AND CATTAIL CREEK WAS ORIGINALLY LOCATED, AND BEING DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON PIN SET ONLINE SOUTH 67°13'09" EAST 114.82 FEET FROM THE NORTHEAST CORNER OF SEABOARD AIR LINE RAILROAD COMPANY; THENCE SOUTH 21°37'17"W 162.24 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 16°18'43" EAST 657.55 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 65°56'31" WEST 714.50 FEET TO AN IRON PIPE FOUND; THENCE NORTH 56°55'46" WEST 636.41 FEET TO AN IRON PIPE FOUND; THENCE NORTH 80°17'46" WEST 418.55 FEET TO AN IRON PIPE FOUND; THENCE NORTH 75°28'45" WEST 348.71 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 63°02'54" WEST 494.20 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 88°00'19" WEST 269.86 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 53°26'59" WEST 586.69 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 23°39'07" WEST 626.35 FEET TO AN IRON PIN SET; THENCE SOUTH 01°11'40" EAST 569.35 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 62°14'20" WEST 259.03 FEET TO AN IRON PIPE FOUND; THENCE NORTH 40°39'32" WEST 1073.78 FEET TO AN IRON PIPE FOUND; THENCE NORTH 85°33'46" WEST 517.31 FEET TO AN IRON PIPE FOUND; THENCE NORTH 69°18'33" WEST 258.34 FEET TO A CONCRETE MONUMENT FOUND; THENCE NORTH 50°23'33" WEST 328.04 FEET TO AN IRON PIN SET; THENCE SOUTH 48°09'43" WEST, PASSING AN IRON PIPE AT 623.38 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF 745.78 FEET TO AN IRON PIN SET; THENCE NORTH 50°32'49" WEST 469.75 FEET TO AN IRON PIPE FOUND; THENCE NORTH 32°58'20" WEST 222.84 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 66°08'44" WEST 40.58 FEET TO AN IRON PIPE FOUND; THENCE SOUTH 86°14'22" WEST 305.95 FEET TO AN IRON PIN SET; THENCE NORTH 7°17'53" WEST 303.80 TO AN IRON PIPE FOUND; THENCE NORTH 15°21'53" WEST 384.14 FEET TO AN IRON PIN SET; THENCE NORTH 43°10'59" WEST 185.60 FEET TO AN IRON PIN SET WHICH IS THE TERMINATION OF SAID TRAVERSE; THENCE NORTH 22°55'01" EAST 1253.70 FEET TO A CONCRETE MONUMENT FOUND; THENCE NORTH 18°52'28" EAST 1779.55 FEET TO THE POINT OF BEGINNING CONTAINING 364.151 ACRES, AS DESCRIBED BY J.A. MICHAEL NICHOLS, LS, VIRGINIA LICENSE #2172.

NOTE: THE ACREAGE SHOWN HEREON IS TO THE TRAVERSE LINE. THE ACREAGE WITHIN THE TRAVERSE LINE AND THE MEAN LOW WATER LINE IS ±19.83 ACRES.

TRACT #2

BEGINNING AT AN IRON PIN SET AT THE COMMON CORNER OF THE SOUTHEAST CORNER OF TRACT #2 AND THE NORTHWEST CORNER OF ALBERT A. FORBES, D.B. 280, PG. 486; THENCE SOUTH 11°12'29" WEST 375.00 FEET TO AN IRON PIN SET; THENCE NORTH 78°47'31" WEST, PASSING AN IRON PIN SET AT 76.41 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF APPROXIMATELY 116.16 FEET TO A POINT AT THE MEAN LOW WATER LINE OF BAILEYS CREEK; THENCE NORTH 11°12'29" EAST 375.00 FEET TO A POINT AT THE MEAN LOW WATER LINE OF BAILEY'S CREEK; THENCE SOUTH 78°47'31" EAST, PASSING AN IRON PIN SET AT 92.25 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF APPROXIMATELY 116.16 FEET TO THE POINT OF BEGINNING CONTAINING 1.00 ACRES±, AS DESCRIBED BY J.A. MICHAEL NICHOLS, LS, VIRGINIA LICENSE #2172.

All of the above Tracts BEING part of the same real estate conveyed to Aqualon Company, a Delaware general partnership, by deed from Hercules Credit, Inc., a Delaware corporation, dated February 1, 1987, recorded June 29, 1989, in the Clerk's Office, Circuit Court, City of Hopewell, Virginia, in Deed Book 220, page 43.

NOTE FOR INFORMATIONAL PURPOSES ONLY:

Tax Map Nos: 048-0204 and 048-0206

SUBJECT, HOWEVER, to agreements, covenants; reservations, restrictions, conditions, limitations and provisions contained in a Deed from Tubize Rayon Corporation to Hercules Powder Company, dated August 22, 1944, recorded September 13, 1944, in Deed Book 39, Page 371.

2. Description of Contamination & Remedy

a. The Administrative Record pertaining to the environmental response project on the Property that is described in this Environmental Covenant is located at:

U.S. Environmental Protection Agency, Region III
Land and Chemicals Division
Office of Remediation (3LC20)
1650 Arch Street, 11th Fl.
Philadelphia, PA 19103

b. The contamination and remedy relating to the Property, including descriptions of the Property before remedy implementation, contaminants of concern, pathways of exposure, limits on exposure, location and extent of contamination, and the remedy/corrective action undertaken is briefly described herein, and is also described in the Final Decision and Response to Comments ("FDRTC") for the Hercules, Inc. Property, Hopewell, Virginia, EPA ID # VAD 003 121 928, dated July 22, 2015, shown in **Exhibit A**.

The Property has been used for industrial purposes for more than 90 years. From 1912 through the World War I era, the Property was part of a DuPont guncotton manufacturing facility. Hercules Incorporated (Hercules) acquired part of the current Property in 1926 to manufacture purified cotton cellulose for use in the chemical and paper industry. In 2008, Ashland acquired Hercules Incorporated. In 2016, Hercules Incorporated was converted to a Limited Liability Company (Hercules LLC). Hercules LLC is an affiliate of Ashland LLC. Hercules LLC remains the operator of the facility.

In 2000, Hercules and EPA entered into a Facility Lead Agreement (FLA) for the implementation of Corrective Action under RCRA and 34 Solid Waste Management Units (SWMUs) were identified; 10 SWMUs were designated as needing further investigation. In addition to the 10 SWMUs, surface water bodies on and adjacent to the Property were investigated. Following a Phase III investigation, SWMUs 16 and 34 required no further action.

SWMU 1, the Main Holding Basin (MHB) was not directly investigated further as impacted soils and sludge were removed and replaced with clean fill. However, groundwater around the MHB did require further investigation.

SWMU 3, SWMU 4, SWMU 5, SWMU 7, SWMU 8 and 29 (addressed as one physical unit), SWMU 14, and SWMU 15 underwent further investigation as did the area around the MHB. Soil, groundwater, and surface water samples were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs), semi-volatile organic compounds (SVOCs) plus TICs, acrylamide, alcohols and glycols, metals, and other inorganic parameters. Sediment samples were analyzed for VOCs plus TICs, SVOCs plus TICs, acrylamide, alcohols and glycols, polychlorinated biphenyls (PCBs), metals, and other organic parameters.

A risk assessment was completed that assumed future use of the Property will be non-residential. Although groundwater concentrations do exceed drinking water standard, no potential hazards or risks associated with anticipated routine exposures were identified for surface water, sediment, vapor inhalation, soil and groundwater. No current or future direct exposures are anticipated with groundwater at the facility. Adverse ecological hazards to terrestrial and aquatic receptors in habitats associated with the facility were determined to be low, not visually observable, and not associated with the presence of chemical constituents in the environment.

EPA's Corrective Action Objective for soils is to attain applicable regional screening levels (RSLs) for industrial soils; these have been attained. EPA's Corrective Action Objectives for groundwater are to restore the groundwater to drinking water standards and to control the exposure to groundwater until such time as groundwater is restored to drinking water standards.

On July 22, 2015, EPA issued a Final Decision and Response to Comments, in which it selected a remedy for the Property (Selected Remedy). The Selected Remedy for the Property consists of land and groundwater use restrictions to be implemented through institutional controls, groundwater monitoring, maintenance of the existing security fence, and implementation of a Materials Management Plan. The area of the Property requiring activity & use limitations is discussed in 3b.

3. Activity & Use Limitations

The Activity & Use Limitations described below are applicable to the area described as Tract #1 and Tract #2 as shown in **Exhibit B** and specific portions of Parcel 1-1 and Parcel 1-4 as shown in **Exhibit C**.

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Specifically, activity and use limitations 1, 2, 3 and 4 as described below are specific to the entire parcel described as Tract #1 and Tract #2. Activity use and limitations 5, 6, and 7, as described below are specific to the restricted area within Tract #1 depicted in Exhibit C.

a. The Property is subject to the following activity and use limitations, which shall run with the land and become binding on Grantor(s) and any successors, assigns, tenants, agents, employees, and other persons under its (their) control, until such time as this covenant may terminate as provided by law:

1. Groundwater at the Property shall not be used for any purpose other than to conduct the operation, maintenance, and monitoring activities required by Virginia Department of Environmental Quality (VADEQ) and/or EPA, unless it is demonstrated to EPA, in consultation with the VADEQ, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the Selected Remedy and EPA, in consultation with VADEQ, provides prior written approval for such use. Any such change to use will require an amendment to this environmental covenant;
2. No new wells will be installed on the Property unless it is demonstrated to EPA, and in consultation with VADEQ, that such wells are necessary to implement the Selected Remedy and EPA and VADEQ provides prior written approval to install such wells;
3. The Property shall not be used for residential purposes unless it is demonstrated to EPA, in consultation with the VADEQ, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the Selected Remedy, and EPA, in consultation with the VADEQ, provides prior written approval for such use. Any change in use will require an amendment to this environmental covenant;
4. The Property will not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the Selected Remedy selected by EPA;
5. All earth moving activities, including excavation, drilling and construction activities, in the areas at the Property where any contaminants remain in groundwater above their maximum contamination levels (MCLs) or EPA Region III's Tap Water Regional Screening Levels, shall be prohibited unless it is demonstrated to EPA, in consultation with the VADEQ, that such activity will not pose a threat to human health or the environment or adversely affect or interfere with the Selected Remedy, and EPA, in consultation with the VADEQ, provides prior written approval for such use. Such activities at the Property shall be conducted in accordance with the Materials Management Plan (MMP) approved by the EPA, in consultation with the VADEQ, specifying protocols for soil, groundwater, and surface water within the plume area which will

be created for all earth moving activities. The approved MMP can be found within the EPA's Administrative Record;

6. A vapor intrusion control system, the design of which shall be approved in advance by EPA, in consultation with the VADEQ, shall be installed in each new structure constructed above the contaminated groundwater plume or within a 100-foot perimeter of the contaminated groundwater plume, unless it is demonstrated to EPA, in consultation with the VADEQ, that vapor intrusion does not pose a threat to human health and EPA, in consultation with the VADEQ, provides prior written approval that no vapor intrusion control system is needed. Any change would require an amendment to this environmental covenant;

7. The existing soil cover over SWMU 5 (old Landfill and Landfill #156) shall be maintained to prevent exposure and provide a substrate for vegetation to grow.

b. Geographic coordinate lists and polygons defining the boundary of activity and use restrictions listed above as 1, 2, 3 and 4 are set forth in **Exhibit B**, as shown below:

Location ID	Latitude	Longitude	Location ID	Latitude	Longitude
1	37.2854792	-77.2611597	21	37.2813660	-77.2776855
2	37.2852243	-77.2612952	22	37.2811223	-77.2768601
3	37.2873234	-77.2674467	23	37.2810105	-77.2750848
4	37.2873946	-77.2674088	24	37.2787589	-77.2727001
5	37.2918318	-77.2804869	25	37.2791054	-77.2719391
6	37.2884910	-77.2819137	26	37.2806741	-77.2720322
7	37.2884030	-77.2819513	27	37.2822441	-77.2710994
8	37.2883240	-77.2819851	28	37.2831952	-77.2694752
9	37.2879244	-77.2821559	29	37.2832270	-77.2685222
10	37.2872077	-77.2824621	30	37.2838423	-77.2670461
11	37.2864134	-77.2828853	31	37.2835981	-77.2659123
12	37.2840322	-77.2841536	32	37.2833981	-77.2644639

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13	37.2836500	-77.2837145	33	37.2824307	-77.2626427
14	37.2826656	-77.2833911	34	37.2832090	-77.2603966
15	37.2818109	-77.2832548	35	37.2849580	-77.2610281
16	37.2818751	-77.2821928	36	37.2853617	-77.2608134
17	37.2819196	-77.2820782	37	37.2799505	-77.2714079
18	37.2814345	-77.2816680	38	37.2798877	-77.2710282
19	37.2805563	-77.2804810	39	37.2809007	-77.2707512
20	37.2819504	-77.2785512	40	37.2809615	-77.2711131

And the boundary of activity and use restrictions listed above as 5, 6 and 7 is set forth in Exhibit C as shown below:

Location ID	Latitude	Longitude	Location ID	Latitude	Longitude
1	37.28133953	77.27327906	43	37.28604911	-77.27744553
2	37.28110438	-77.27358593	44	37.28608827	-77.277297
3	37.28106746	-77.27370088	45	37.28606993	-77.27712891
4	37.28106035	-77.27384143	46	37.28579391	-77.27639814
5	37.28108304	-77.27432616	47	37.28562776	-77.27566292
6	37.28116076	-77.27471055	48	37.2855228	-77.27555381
7	37.28114631	-77.27547007	49	37.28529732	-77.27546357
8	37.28133965	-77.27712937	50	37.28521381	-77.27539675
9	37.28148652	-77.27779586	51	37.28497336	-77.27508284
10	37.28149869	-77.27796494	52	37.28482497	-77.27480455
11	37.28147238	-77.2781354	53	37.2847224	-77.27440267

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12	37.28140717	-77.27834529	54	37.28471462	-77.2741662
13	37.28127617	-77.27864019	55	37.284638	-77.2738277
14	37.28115776	-77.27883752	56	37.28463803	-77.27361204
15	37.28112076	-77.2789823	57	37.2847134	-77.27349182
16	37.28111193	-77.27924246	58	37.28519105	-77.27330694
17	37.28119501	-77.27990697	59	37.28536662	-77.27312698
18	37.28118194	-77.28007026	60	37.28586324	-77.27289863
19	37.28112961	-77.28025777	61	37.28629087	-77.27259423
20	37.28113125	-77.28038361	62	37.28684475	-77.27242465
21	37.28119088	-77.2805374	63	37.28691009	-77.27236822
22	37.28130173	-77.28063284	64	37.28697739	-77.27224611
23	37.28226985	-77.28091569	65	37.28699224	-77.27204851
24	37.2824992	-77.28103162	66	37.28691394	-77.27186942
25	37.28263128	-77.28102719	67	37.28680309	-77.27178536
26	37.28269757	-77.28098928	68	37.2859917	-77.27170523
27	37.28274638	-77.28092299	69	37.2857508	-77.27157944
28	37.28285489	-77.28063998	70	37.28562711	-77.27157925
29	37.28293644	-77.280495	71	37.28509505	-77.27118625
30	37.28309965	-77.28027967	72	37.28493181	-77.27116061
31	37.2834619	-77.27988469	73	37.28472452	-77.27123606
32	37.28377134	-77.27935302	74	37.28441931	-77.27144
33	37.28389865	-77.27894519	75	37.28412679	-77.27167891
34	37.28417597	-77.27754468	76	37.28367387	-77.27211617

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35	37.28422268	-77.2774052	77	37.28322079	-77.27246778
36	37.28427924	-77.27731864	78	37.28286047	-77.27260913
37	37.28438343	-77.27726695	79	37.28254419	-77.27265818
38	37.28465022	-77.277287	80	37.2823336	-77.27275038
39	37.28539023	-77.27755419	81	37.28203571	-77.27279919
40	37.28567849	-77.27761289	82	37.28183422	-77.27286561
41	37.28590999	-77.27758865	83	37.28142894	-77.27311639
42	37.28598934	-77.27753163	84	37.28134416	-77.27320573

4. Notice of Limitations in Future Conveyances

Each instrument hereafter conveying any interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.

5. Compliance and Use Reporting

a. By the end of February 2019 and every three years thereafter, following the Agency's approval of this environmental covenant until the specified remediation standards are met and the Agency agrees in writing that reporting is no longer required and whenever else requested in writing by the Agency, the then current owner of the Property shall submit, to the Agency and any Holder listed in the Acknowledgements below, written documentation stating whether or not the activity and use limitations in this environmental covenant are being observed. This documentation shall be signed by a qualified and certified professional engineer who has inspected and investigated compliance with this environmental covenant.

b. In addition, within one (1) month after any of the following events, the then current owner of the Property shall submit, to the Agency and Holder listed in the Acknowledgements below, written documentation describing the following: noncompliance with the activity and use limitations in this environmental covenant; transfer of the Property; changes in use of the Property; or filing of applications for building permits for the Property and any proposals for

any site work, if such building or proposed site work will affect the contamination on the Property subject to this environmental covenant.

6. Access by the Holder and Agency

In addition to any rights already possessed by the Holder and the Agency, this Environmental Covenant grants to the Holder, the Agency, and the VADEQ a right of reasonable access to the Property in connection with implementation, inspection, or enforcement of this Environmental Covenant.

7. Recording & Proof & Notification

a. Within 90 days after the date of the Agency's approval of this UECA Environmental Covenant, the Grantor shall record, or cause to be recorded, this Environmental Covenant with the Clerk of the Circuit Court for each locality wherein the Property is located. The Grantor shall likewise record, or cause to be recorded, any amendment, assignment, or termination of this UECA Environmental Covenant with the applicable Clerk(s) of the Circuit Court within 90 days of their execution. Any UECA Environmental Covenant, amendment, assignment, or termination recorded outside of these periods shall be invalid and of no force and effect.

b. The Grantor shall send a file-stamped copy of this Environmental Covenant, and of any amendment, assignment, or termination, to the Holder and the Agency within 60 days of recording. Within that time period, the Grantor also shall send a file-stamped copy to the chief administrative officer of each locality in which the Property is located, any persons who are in possession of the Property who are not the Grantors, any signatories to this Environmental Covenant not previously mentioned, and any other parties to whom notice is required pursuant to the Uniform Environmental Covenants Act.

9. Termination or Amendment

This environmental covenant is perpetual and runs with the land unless terminated or amended (including assignment) in accordance with UECA.

10. Enforcement of environmental covenant

This environmental covenant shall be enforced in accordance with § 10.1-1247 of the Code of Virginia.

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ACKNOWLEDGMENTS:

GRANTOR

Ashland Specialty Ingredients G.P

, Grantor

Date

June 20, 2017

By (signature):

[Signature] KMW

Name (printed):

Kraig A. Kunkemoeller

Title:

Director, Real Estate & Facilities

STATE of OHIO
COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF DELAWARE

On this 20th day of June, 2017, before me, the undersigned officer, personally appeared Kraig A. Kunkemoeller (Owner, Grantor) who acknowledged himself/herself to be the person whose name is subscribed to this environmental covenant, and acknowledged that s/he freely executed the same for the purposes therein contained.

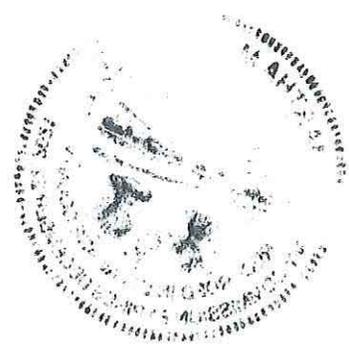
In witness whereof, I hereunto set my hand and official seal.

My commission expires: 12/22/2021

Registration #: RE-624161

Martha M. Cornett

Notary Public



HOLDER(S)

Ashland Specialty Ingredients G.P

, Grantee

Date

June 20, 2017

By (signature):

[Handwritten Signature]

Name (printed):

Kraig A. Kumbenseller

Title:

Director, Real Estate & Facilities

STATE OF OHIO
COMMONWEALTH OF VIRGINIA

CITY/COUNTY OF DELAWARE

On this 20th day of June, 2017, before me, the undersigned officer, personally appeared (Holder, Grantee) who acknowledged himself/herself to be the person whose name is subscribed to this environmental covenant, and acknowledged that s/he freely executed the same for the purposes therein contained.

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

My Commission expires: 12/22/2021

Registration #: RE-62461

Notary Public Martha M. Cornett



0036

AGENCY

APPROVED by the U.S. Environmental Protection Agency, Region III as required by § 10.1-1238 et seq. of the Code of Virginia.

Date _____ By (signature): Catherine A. LA
 Name (printed): Catherine A. Libertz
 Title: Acting Director, Land & Chemicals

STATE OF Pennsylvania

CITY/COUNTY OF Philadelphia

On this 29 day of June, 2017, before me, the undersigned officer, personally appeared Catherine Libertz of the United States Environmental Protection Agency, who acknowledged himself/herself to be the person whose name is subscribed to this environmental covenant, and acknowledged that s/he freely executed the same for the purposes therein contained.

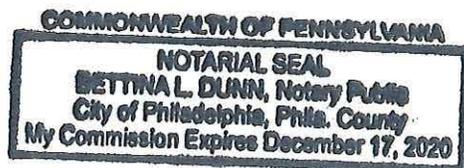
In witness whereof, I hereunto set my hand and official seal.

My commission expires: December 17, 2020

[Affix Seal]

Bettina L. Dunn

Notary Public



SEEN AND RECEIVED by the Virginia Department of Environmental Quality

0037

Date

By (signature):

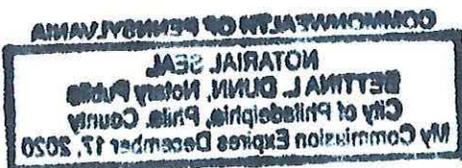


Name (printed):

Brett Fisher

Title:

Team Leader, RCRA Corrective Action



0038

EXHIBIT A

0039



**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III**

**FINAL DECISION
AND
RESPONSE TO COMMENTS**

**HERCULES, INC.
111 HERCULES ROAD
HOPEWELL, VIRGINIA**

EPA ID NO. VAD 003 121 928

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
FINAL DECISION AND RESPONSE TO COMMENTS

PURPOSE

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC) under the authority of 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.* to the Hercules facility located at 1111 Hercules Road in Hopewell, Virginia (Facility).

The 390-acre Facility is located in the eastern portion of the City of Hopewell, Virginia. Hopewell is located southwest of Richmond near the confluence of the James and Appomattox Rivers.

On May 29, 2015, EPA issued a Statement of Basis (SB) which described the information gathered during the environmental investigation at the Facility, and the Proposed Remedy for the Facility. The SB is hereby incorporated into this Final Decision by reference and made a part hereof as Attachment A.

FINAL REMEDY

The selected remedy for the Facility consists of land and groundwater use restrictions to be implemented through institutional controls (ICs), groundwater monitoring, maintenance of the existing security fence and implementation of a Materials Management Plan.

The following land and groundwater use restrictions and access requirements are required to ensure the short- and long-term reliability of the selected remedy.

1. Groundwater at the Facility shall not be used for any purpose other than to conduct the operation, maintenance, and monitoring activities required by Virginia Department of Environmental Quality (VADEQ) and/or EPA, unless it is demonstrated to EPA, that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy and EPA provides prior written approval for such use;
2. No new wells will be installed on Facility property unless it is demonstrated to EPA that such wells are necessary to implement the selected remedy and EPA provides prior written approval to install such wells.

3. The Facility property shall not be used for residential purposes unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy, and EPA provides prior written approval for such use;
4. All earth moving activities, including excavation, drilling and construction activities, in the areas at the Facility where any contaminants remain in groundwater above their MCLs or EPA Region III's Tap Water RSL, shall be prohibited unless it is demonstrated to EPA that such activity will not pose a threat to human health or the environment or adversely affect or interfere with the selected remedy, and EPA provides prior written approval for such use. In the event of such approval, a Materials Management Plan specifying protocols for soil, groundwater, and surface water within the plume areas will be created for all earth moving activities and submitted in writing to EPA for review and approval;
5. A vapor intrusion control system, the design of which shall be approved in advance by EPA, shall be installed in each new structure constructed above the contaminated groundwater plume or within 100-foot around the perimeter of the contaminated groundwater plume, unless it is demonstrated to EPA that vapor intrusion does not pose a threat to human health and EPA provides prior written approval that no vapor intrusion control system is needed;
6. The existing soil cover over SWMU 5 (old Landfill and Landfill #156) shall be maintained to prevent exposure and provide a substrate for vegetation to grow
7. The Property will not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the selected remedy selected by EPA in this FDRTC;
8. EPA, VADEQ, and/or their authorized agents and representatives, shall have access to the Property to inspect and evaluate the continued effectiveness of the selected remedy and if necessary, to conduct additional remediation to ensure the protection of the public health and safety and the environment based upon the selected remedy selected in the FDRTC.

The selected remedy also requires the development and implementation of a Materials Management Plan to be submitted for review and approval by EPA before any earth moving activities, including construction and drilling, can be conducted in groundwater known to contain COCs. The Materials Management Plan will detail how soil and groundwater will be managed during any future subsurface activities conducted at the Facility. The Materials Management Plan will also detail how all excavated soils will be handled and disposed.

RESPONSE TO COMMENTS

On May 29, 2015, EPA provided a 30-day public comment period on the proposed remedy for the Facility as described in the Statement of Basis. The 30-day public comment period ended on June 30, 2015. EPA received comments on the proposed remedy from Ashland, Inc., owner of the Facility. No request for a public meeting was received. Based on the public comments received, EPA has determined that it is not necessary to make any modifications to the proposed remedy.

The following is a summary of the comments received and EPA's responses to those comments:

Comments from Ashland, Inc.

In its June 19, 2015 letter, Ashland provided comments on 4 specific sections of the SB as follows:

Comment 1:

"Section 5.0: Corrective Action Objectives: Using Regional Screening Levels (RSLs) identified as the Corrective Action Objectives (CAOs) for soil and Maximum Contaminant Levels (MCLs) and RSLs (for tap water) as CAOs for groundwater is inappropriate.

EPA's own guidance states that RSLs are typically not to be considered clean-up objectives or goals. For example, USEPA's Soil Screening Guidance: User's Guide; Publication 9355.4-23 July 1996, specifically recommends this approach for developing remediation goals: 1. Identify screening levels at scoping; 2. modify them as needed at the end of the RI or during the FS based on site-specific information from the baseline risk assessment; and 3. ultimately select remediation levels in the ROD. Although this project is under the RCRA program rather than CERCLA, the application of RSLs and the approach to selection of remediation target goals in the two programs is essentially the same.

USEPA has already approved a site-specific human health risk assessment (HHRA) for the site. The results from the HHRA should be used as the basis for establishing the site-specific CAOs. The HHRA determined that concentrations of site-specific constituents of concern (COCs) were acceptable for the defined receptors. Identifying CAOs that are more stringent than the concentrations already determined to be acceptable in the HHRA is overly conservative. Hercules requests that the approved risk assessment, as well as site-specific realities such as institutional controls, be used as the basis for the selection of final remedial goals for the site."

EPA Response:

As a basis for its proposed remedy for the Facility, EPA did consider EPA-approved risk assessments and site-specific conditions. Therefore, no changes to the proposed remedy are appropriate.

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Specifically, in Section 5.0 of the Statement of Basis, EPA addressed the Corrective Action Objectives for both Soils and Groundwater. For soils, EPA acknowledged that the Facility has been used for industrial purposes for more than 90 years and that the anticipated future use of the Facility would remain industrial. In addition, Hercules provided an industrial use designation for future use in Section 2.3 of the Phase III Site Investigation Summary Report (2007). Therefore, the Corrective Action Objective in the Statement of Basis for soils was to use the RSLs for industrial soils. EPA, in Section 6, "Proposed Remedy" of the SB, goes on to state that "Facility soils have attained applicable RSLs for industrial use". Therefore, EPA determined that there is no need to establish risk assessment remedial goals for soil given that EPA already determined that Facility soils meet the Corrective Action Objective.

For groundwater, EPA expects final remedies to return usable groundwater to its maximum beneficial use, which for the Facility both EPA and Virginia DEQ have determined would be as a potential source of drinking water. Therefore, the Corrective Action Objectives for drinking water are Maximum Contaminant Levels (MCLs) and, RSLs (for tap water) if there are no applicable MCLs, throughout the contaminated plume. In Section 6 of the SB, EPA's Proposed Remedy for groundwater calls for monitored natural attenuation until MCLs or RSLs, as applicable, are met. Accordingly, the remedy requires a groundwater monitoring plan to address the long-term monitoring of the natural attenuation processes and the implementation of groundwater use restrictions until MCLs or RSLs, as applicable, are attained.

Comment 2:

"Section 6.2: Proposed Remedy – Groundwater: Hercules requests that long-term monitoring be the only necessary current and future action for groundwater at the site. Hercules has demonstrated that natural attenuation is occurring at the site and proposes focused groundwater monitoring to confirm stable or downward trends at or below the conditions evaluated in the HHRA as the appropriate and protective remedy for groundwater. As stated above, the use of RSLs as cleanup levels is inappropriate given the results of the HHRA and use of institutional controls that prohibit the use of groundwater for potable purposes. Additionally, Hercules recognizes that in the unlikely event that groundwater migration beyond the site boundary occurs or if trends would increase significantly, additional evaluation might be necessary. Hercules proposes that the frequency, locations and period of monitoring be negotiated during the preparation of a groundwater monitoring plan for the site."

EPA Response:

The groundwater remedy proposed in the Statement of Basis requires long-term monitoring of the natural attenuation processes and the implementation of groundwater use restrictions until MCLs or RSLs, as applicable, are attained. See EPA Response to Question 1 concerning Groundwater.

Comment 3:

“Section 6.3.4: Proposed Remedy – Institutional Controls: This criterion restricts the use of “All earth moving activities, including excavation, drilling and construction activities in areas at the Facility where any contaminants remain in soils above EPA Region III’s Screening Levels or in groundwater above their MCLs or EPA Region III’s Tap Water RSLs...” without EPA approval.

For soils, paragraph 6.1 of the SB indicates that “Facility soils have attained applicable RSLs for industrial use.” and “...that there are no unacceptable risks to human health and the environment via the soil direct contact or inhalation exposure pathway for the present and anticipated industrial use of the Facility property.” Similarly for groundwater, Section 4.1 of the SB concludes from the HHRA that “...potential hazards and risks associated with anticipated exposures do not pose risk to humans who may live nearby or work at the Facility.”

The approved risk assessment demonstrates that the non-cancer hazards and potential risks for a construction scenario including excavation work are acceptable and that no restrictions on current or future earth moving activities at the site are necessary.

Therefore, since the soils have attained the RSLs for industrial use and institutional controls will be placed on the facility to restrict the use of the facility to industrial purposes, the placement of such broad restrictions on the facility and a requirement for USEPA approval for intrusive on-site activities are unnecessary. Hercules requests that these unnecessary restrictions be removed from the Statement of Basis. “

EPA Response:

Based on the soil results collected during the RCRA Facility Investigation, there were no contaminants in Facility soils above applicable RSLs for Industrial Soils. The proposed remedy restricted earth moving activities where any contaminants remain in in soils above RSLs for Industrial Soils or in groundwater above MCLs or RSLs. Given that there were no contaminants in Facility soils above applicable RSLs for Industrial Soils, a Materials Management Plan would have to be submitted for earth moving activities that will impact or encounter the contaminated groundwater plume underlying the Facility. EPA has modified the final remedy for clarification.

Comment 4:

“Sections 6.3.5: Proposed Remedy – Institutional Controls: As stated above, the HHRA evaluated vapor intrusion for the Indoor Industrial Worker receptor and found potential risks to be acceptable. Therefore, the requirement for installation of vapor intrusion control systems in structures above or within 100 feet of the groundwater contaminant plume is inappropriate and unnecessary. As long as concentration trends in groundwater continue to remain stable or decline, additional controls on vapor intrusion are unnecessary. Hercules requests the requirement for installation of vapor intrusion control systems be removed from the Statement of Basis. “

EPA Response:

EPA disagrees with Hercules' request to remove the requirement for installation of vapor intrusion control systems. The selected remedy includes the provision for vapor control to ensure that any new building over or within 100 feet of an existing groundwater plume be designed to prevent vapor intrusion. The HHRA evaluated a construction worker exposed to contaminated soil, which is a different exposure scenario than a worker inside a building. EPA in the selected remedy also does not require that a vapor system be installed in new buildings if it is demonstrated that there is no threat to human health.

DECLARATION:

Based on the Administrative Record compiled for the Corrective Action at the Facility, EPA has determined that the Final Remedy selected in this Final Decision and Response to Comments is protective of human health and the environment.

Date: _____

7.22.15



John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

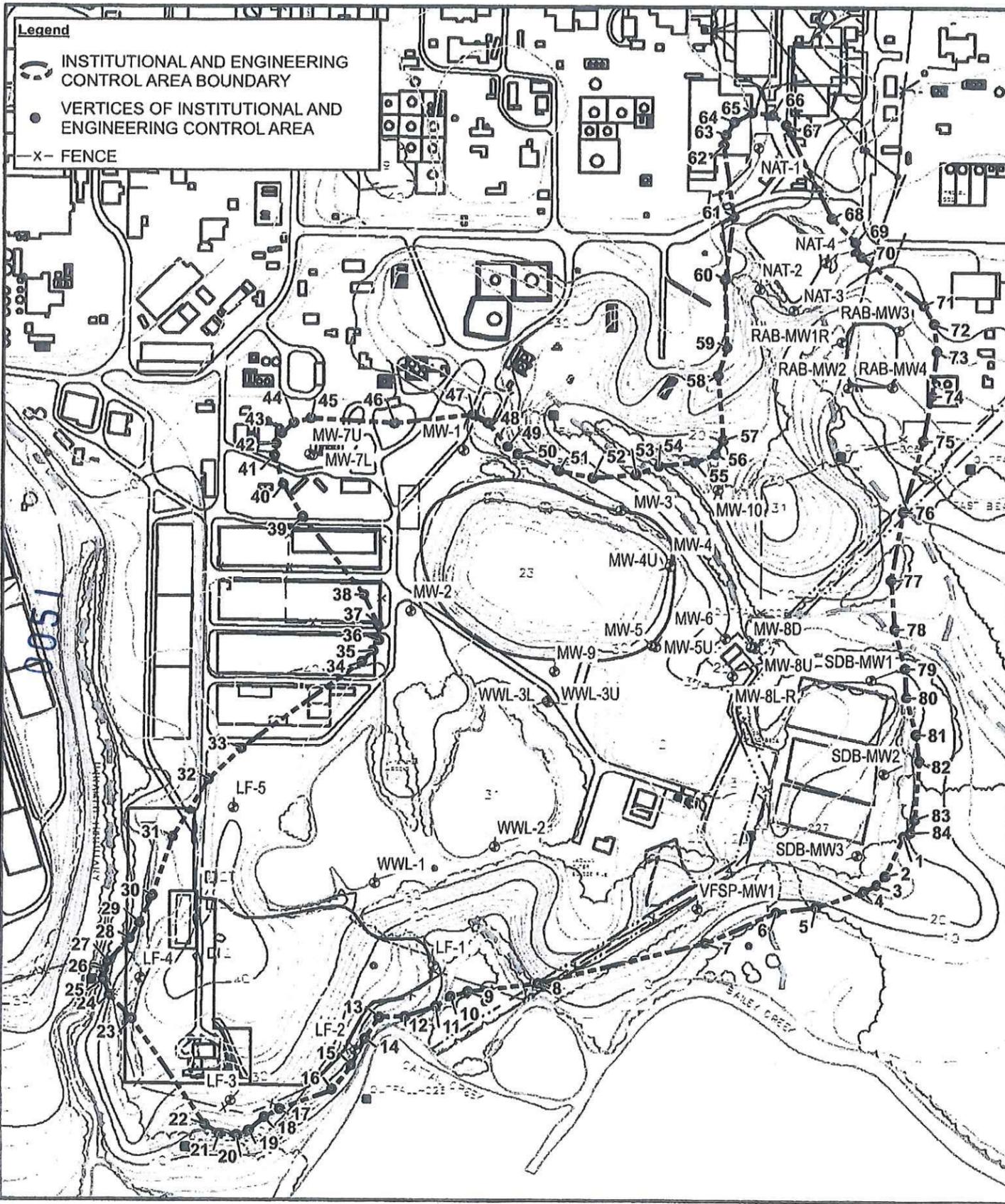
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EXHIBIT B

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EXHIBIT C

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DRAFTED BY:	GKS	Activity and Use Limitation Area
CHECKED BY:	DMC	HERCULES, LLC HOPEWELL, VIRGINIA
REVIEWED BY:	KH	
NORTH	Groundwater & Environmental Services, Inc. 3701 SAUNDERS AVENUE, RICHMOND, VA 23227	
SCALE IN FEET		DATE
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		FIGURE
		1

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 HOPEWELL CIRCUIT COURT ON
 AUGUST 3, 2017 AT 10:28 AM
 TAMARA J. WARD, CLERK
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Masha Brew