FINAL (04-21-2022)

ENVIRONMENTAL COVENANT

SITE NAME: Venator Americas LLC (Former Rockwood Pigments Plant) EPA ID: MDD062011796 GRANTOR/OWNER/HOLDER: Excalibur Realty Company PROPERTY ADDRESS: 7011 Muirkirk Road, Beltsville, MD 20705

This Environmental Covenant is executed this _____ day of _____ 202 pursuant to the provisions of Subtitle 8, Title 1 of the Environment Article, Ann. Code of Md. (2015 Repl. Vol.). This Environmental Covenant subjects the Property identified in Section 1 to the activity and/or use limitations in this document. This Environmental Covenant has been approved by the United States Environmental Protection Agency ("EPA").

1. <u>Property Affected</u>. The property affected by this Environmental Covenant is located approximately two miles north of Beltsville, Maryland at 7011 Muirkirk Road, Prince George's County, Maryland. ("Property")

The postal street address of the Property is: 7011 Muirkirk Road, Beltsville, MD 20705. The County Land Records Deed Reference: Prince George's County, Liber 36571/Folio 372.

Tax Parcel Information for the Property is: Map 0013, Grid 00E1, Parcel 0009, Neighborhood: 10001.17.

The Maryland Department of Assessment and Taxation Real Property Account Identifiers are: District-01, Account Number-0043851.

The latitude and longitude of the center of the Property affected by this Environmental Covenant are: 39.0611°, -76.88306°.

The Property has been known by the following names:

 Venator Americas LLC; Huntsman P-A Americas LLC; Rockwood Pigments NA, Incorporated; Laporte Pigments; Mineral Pigments; Rockwood Pigments Plant.

A complete legal description of the Property is attached to this Environmental Covenant as $\underline{Exhibit}$ <u>A</u>. A Property Map with Location Coordinates is attached to this Environmental Covenant as $\underline{Exhibit B}$.

2. <u>Property Owner/Grantor/Holder</u>. Excalibur Realty Company ("Excalibur"), a Delaware Corporation is the owner ("Owner") of the Property and the Grantor/Holder of this Environmental Covenant. Its mailing address is:

Excalibur Realty Company 4250 Congress Street Suite 900 Charlotte, NC 28209

3. <u>Regulatory Program(s) Issuing Determination</u>. The following EPA regulatory program(s) is (are) responsible for having issued a determination requiring the use of this Environmental Covenant:

EPA Corrective Action Program Resource Conservation and Recovery Act

Department Programs

- Voluntary Cleanup Program
- Controlled Hazardous Substance Enforcement Program
- Oil Control Program
- □ Solid Waste Program
- Resource Management Program
- □ Other Program:

4. <u>Summary of Identified Contaminants</u>. Soil sampling results from environmental investigations indicated that hexavalent chromium is the primary contaminant of concern ("COC") for soil at the Property. Hexavalent chromium was detected in Property soil at concentrations exceeding the EPA Industrial Regional Screening Level ("RSL") in several soil borings. Two areas within the Property (Building 6 and 9 Areas) exhibited hexavalent chromium soil concentrations greater than 100 milligrams per kilogram (mg/kg). Elevated soil detections were detected within the first 5 feet of ground surface and decreased with depth. Historical floor drains and sumps identified in onsite buildings may have served as a conduit for sub-slab soil impacts.

Total and hexavalent chromium are COCs in groundwater on the Property and beyond the Property boundary. Observed groundwater sample results indicate that shallow groundwater is impacted, and concentrations decrease with depth. Groundwater impacts for chromium exceeds a concentration of 1,000 μ g/L in a portion of the groundwater underlying the Property. Historical monitoring results from monitoring wells near the Property boundary show slowly declining trends.

On November 10, 2021, EPA issued a Final Decision selecting a final remedy for the Property (Final Remedy). The Final Remedy requires onsite source control measures for impacted soils, on and offsite monitored natural attenuation with onsite in-situ treatment for impacted groundwater, and activity and use limitations described in Section 5 of this Environmental Covenant.

5. <u>Activity & Use Limitations</u>. The Property is subject to the following activity and use limitations, which shall be binding upon to the Owner and each subsequent owner of the Property.

(a) **Property Use.** The Property shall only be used for non-residential purposes such as commercial or industrial uses. The Property shall not be used for "residential" or "recreational" land uses, unless it is demonstrated in writing for EPA's prior approval that such use will not pose a threat to human health or the environment or adversely affect or interfere with the Final Remedy, and EPA provides written approval in advance of such use. For purposes of this limitation, "residential" land uses include without limitation: single family homes, multiple family dwellings, schools, daycare or childcare centers, apartment buildings, dormitories, eldercare facilities, other residential-style facilities, hospitals, and in-patient care facilities. "Recreational" uses include without limitation: playgrounds, gardens, parks, picnic areas, golf courses, athletic fields and facilities, dog parks, and other recreational areas.

(b) <u>Groundwater Use</u>. Groundwater at the Property shall not be used for any purpose other than the operation, maintenance, and monitoring activities required by 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 Final Remedy, and EPA provides prior written approval for such use. No new wells shall be installed on the Property unless it is demonstrated to EPA that such wells are necessary to implement the Final Remedy, and EPA provides prior written approval to install such wells. By December 31st of every fifth year following the execution of this Environmental Covenant, Owner or the then-current owner shall conduct a groundwater well user survey and notify EPA, the Prince George's County Health Department, and all affected offsite property owners of current groundwater contamination conditions, and whether these conditions should prevent groundwater use, until EPA determines the groundwater cleanup levels selected in the Final Remedy have been achieved.

(c) <u>Material Management Plan</u>. The Land Use Control ("LUC") Area includes existing paved surfaces including the "Building 6 Area" and "Building 9 Area", as shown on <u>Exhibit C</u> (Property Map with the Land Use Control Area) contain contaminated soils with concentrations of hexavalent chromium as described in Section 5 of this Environmental Covenant and in the reports referenced in <u>Exhibit D</u> (Select Documents from the Administrative Record). All "Material Management Activities" performed in the LUC Area, including without limitation, excavation, drilling, grading, construction, or soil removal, shall be conducted in compliance with an EPA-approved "Material Management Plan" ("MMP") attached as <u>Exhibit E</u>. Any digging, excavating, grading, trenching for utilities, pile driving or other earth moving activities shall be conducted on the Property or any part thereof including, without limitation, the excavation or removal of asphalt, concrete, soil and foundations and the digging of foundations for buildings and trenches for utilities, in compliance with the EPA-approved MMP and all applicable laws. All excavated material shall be thoroughly characterized before disposal and the analytical results shall be the basis for appropriate disposal at a permitted disposal facility for the material.

(d) <u>Existing Surface Coverage and Maintenance</u>. To prevent exposures to residual impacted soils within the LUC Area at the Property, the existing asphalt and concrete pavement and buildings are included as an engineering control (collectively, the "surface cap") as shown in Exhibit C. The surface cap shall remain in place and in a condition that does not allow for physical direct contact with underlying soils. Any disturbance of the surface cap is prohibited unless EPA provides prior written approval, and the disturbance and subsequent restoration of the

cap is conducted in accordance with the EPA-approved MMP. The surface cap shall be regularly monitored and maintained, and inspected at least annually, to ensure cap integrity. If, based on the inspections or other observations, any area of the surface cap has become damaged, deteriorated or if an area is removed or disturbed in any manner, the Owner or its successor and/or assign, shall fully and properly repair any damages, cracks, settlement, separation or deterioration, or replace such areas to the conditions set forth in **Exhibit C** as approved in advance by EPA, consistent with sound engineering practice, the then-current Property use, and applicable laws.

(f) <u>Existing Security Fence</u>. The existing security fence around the facility Property is an engineering control to limit access to the Property and prevent trespassing. The fence shall have proper signage affixed to the fence to warn against trespassing and shall be inspected, operated, maintained and repaired to uphold the integrity of the fence.

6. <u>Notice of Limitations in Future Conveyances</u>. This Environmental Covenant runs with the land and shall be binding on successors in interest. Each instrument hereafter conveying any interest in the Property 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. The then-current owner shall notify EPA in writing at least thirty (30) days prior to any transfer of the Property or of any portion of the Property. Such written notice shall include the name, address, and telephone numbers of the transferee to whom such interest is conveyed.

7. <u>Access by EPA and the Maryland Department of the Environment</u> ("Department"). In addition to any rights already possessed by EPA and/or the Department, this Environmental Covenant grants to EPA and the Department a right of access to the Property to implement or enforce this Environmental Covenant.

8. <u>Access by the Holder</u>. In addition to any rights already possessed by the Holder, this Environmental Covenant grants to the Holder a right of access to the Property to implement and/or enforce this Environmental Covenant.

9. <u>Recordation & Filing with Registry</u>. The Owner shall record this Environmental Covenant in the Land Records of Prince George's County within 30 days following execution of this Environmental Covenant. Within 30 days thereafter, Owner shall send proof of the recording to EPA and the Department. This Environmental Covenant shall be filed as soon as possible after execution in the Registry of Environmental Covenants maintained by the Department. This Environmental Covenant shall be filed as soon as possible after execution in the Registry of Environmental Covenants maintained by the Department. This Environmental Covenant may be found electronically on the Department's website at: https://mde.maryland.gov/programs/Land/MarylandBrownfieldVCP/Pages/ueca.aspx

10. <u>Termination or Modification</u>. This Environmental Covenant runs with the land unless terminated or modified in accordance with § 1-808 or § 1-809 of the Environment Article, Ann. Code of Md. (2015 Repl. Vol.). The then-current owner agrees to provide EPA and the Department with written notice of the pendency of any proceeding that could lead to a foreclosure referred to in § 1-808(a)(4) of the Environment Article, Ann. Code of Md. (2015 Repl. Vol.), within seven calendar days of the owner's becoming aware of the pendency of such proceeding.

11. <u>EPA's Address</u>. A recorded copy of this Environmental Covenant and all other subsequent communications required by this Environmental Covenant shall be sent by email to EPA at R3_RCRAPOSTREM@epa.gov.

12. **The Department's Address.** Communications with the Department regarding this Environmental Covenant shall be sent to: Registry of Environmental Covenants, Maryland Department of the Environment, Land Management and Administration, 1800 Washington Blvd., Baltimore, MD 21230.

13. <u>Administrative Record</u>. The Administrative Record pertaining to the Final Remedy is located at the United States Environmental Protection Agency, Region III, and can be viewed by contacting R3_RCRAPOSTREM@epa.gov. In addition, records pertaining to the Final Remedy selected by EPA are maintained by the Department at 1800 Washington Blvd., Suite 625, Baltimore, MD 21230.

14. <u>Enforcement</u>. A civil action for injunctive or other equitable relief for violating this Environmental Covenant may be maintained by the Department or by the Attorney General of the United States, on behalf of EPA. In addition, the Department and EPA reserve their regulatory authorities under any law to enforce the activity and use limitations described in Section 5, above.

15. Compliance Reporting. Within 21 days after written request by EPA or the Department, the then-current owner of the Property shall submit to EPA, the Department and any Holder listed in Section 2, written documentation demonstrating ongoing compliance with the standards and requirements of the Activity and Use Limitations set forth in Section 5 of this Environmental Covenant. In addition, within 21 days after any of the following events: (a) transfer of title of the Property or of any part of the Property affected by this Environmental Covenant; (b) noncompliance with Section 5 (Activity and Use Limitations); and (c) an application for a permit or other approval for any building or site work that could disturb, alter or affect contamination on any part of the Property, the then-current owner shall send notice and a report to the Agencies and any Holder. The report shall confirm compliance with the Activity and Use Limitations of Section 5 or, in the event of noncompliance, shall state the actions that have been or will be taken to restore and assure future compliance.

16. <u>Severability</u>. The sections of this Environmental Covenant shall be severable. Should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

IN WITNESS WHEREOF, the parties hereto have caused this Environmental Covenant to be executed and delivered as of the day and year first above written.

ACKNOWLEDGMENTS by Grantor/Owner, any Grantee(s)/Holder(s) and EPA in the following form:

ATTEST:

Date: 6 3 2022

Exceliber Real + Campany, Grantor/Owner/Holder By: Tohn Gelford Name: John Glfford Title: Resider

STATE OF North Carolina) COUNTY OF Mecklenburg)

On this 3 day of 3 - 2022, before me, the undersigned, personally appeared 3 - 2022, before me, the undersigned, whose name is subscribed to the within instrument and acknowledged that he/she executed the same for the purposes therein contained.

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

Any

(Name of notary public typewritten or printed) Notary Public

My commission expires: Oct 8, 2026

LORENZO RAMOS NOTARY PUBLIC MECKLENBURG COUNTY, NC COMMISSION EXP. OCT.19,2026 Environmental Covenant

Property Address: 7011 Muirkirk Road, Beltsville, MD 20705 Deed Reference: Prince George's County, Liber 36571/Folio 372 Tax Account Identification Number: District-01, Account Number 0043851

APPROVED, by United States Environmental Protection Agency, Region III

Date: 7/8/22

By:

Dana Aunkst, Director Land, Chemicals, and Redevelopment Division United States Environmental Protection Agency Region III

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COMMONWEALTH OF PENNSYLVANIA COUNTY OF Courses lee b

On this 2 day of 3 day of 2 day of 2

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

Commonwealth of Pennsylvania - Notary Seal CASEY SWIGERT - Notary Public Cumberland County My Commission Expires Jun 3, 2023 Commission Number 1323030

(Name of notary public typewritten or printed) Notary Public

June 3,2023 My commission expires:

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EXHIBIT A

Legal Description



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

11830 West Market Place, Suite F • Fulton, MD 20759 • 410-792-8086 • (FAX) 410-792-7419

LEGAL DESCRIPTION 7011 MUIRKIRK ROAD AKA PARCELS 9 & 181 TAX MAP 13 1ST DISTRICT PRINCE GEORGES COUNTY, MARYLAND

Beginning for the same at a nail set at the corner of Pigment Street, 22 feet wide and Conway Road, 61 feet wide, which is the beginning of the first line of Premises A of a deed dated, December 22, 2014, from Rockwood Pigments NA to Excalibur Realty Company, which is recorded among the land records of Prince Georges County, Maryland in liber 36571 at folio 372, thence binding on all of said 1st line and all of the 6th and 7th lines of Tract 2 of said deed, and the Northerly side of Pigment Street, as now surveyed, referring all courses of this description to the Maryland State Grid System, NAD 83 (2011) datum

1) North 54 degrees 58 minutes 54 seconds West 483.17 feet to a pin and cap now set in the right-of-way line of CSX Transportation Inc., thence leaving Pigment Street and running thru points 93 to 97 of a deed dated, March 1, 1834, from Doctor Washington Duvall, Trustee, to the Baltimore and Ohio Railroad Company, which is recorder amount the land records of Prince George's County in liber AB 8 at folio 413, 6 courses, as now surveyed

2) North 39 degrees 15 minutes 15 seconds East 64.03 feet, thence

3) North 38 degrees 15 minutes 27 seconds East 103.95 feet, thence

4) North 38 degrees 15 minutes 17 seconds East 99.98 feet, thence

5) North 38 degrees 45 minutes 21 seconds East 94.06 feet, thence

6) North 40 degrees 00 minutes 22 seconds East 101.47 feet, thence

7) North 39 degrees 30 minutes 18 seconds East 39.23 feet to intersect the southerly side of Muirkirk Road, 67 feet wide, thence binding on the southerly side of Muirkirk Road, 2 courses

8) South 66 degrees 24 minutes 18 seconds East 43.73 feet, thence

9) Southerly by a curve to the right 282.95 feet along the arc to a pin and cap now set, said curve having a radius of 1,876.36 and a chord of South 62 degrees 05 minutes 06 seconds East 282.68 feet, thence leaving Muirkirk Road

KCI Technologies, Inc.

www.kci.com

10) South 16 degrees 31 minutes 43 seconds East 34.41 feet to an x-cut now set in the right-ofway line of Conway Road, thence binding on the northerly right-of-way line of Conway Road

11) South 24 degrees 21 minutes 28 seconds West 532.94 feet, to the POINT OF BEGINNING.

Containing 220,016 square feet or 5.051 acres of land, more or less in the above description.

The land described above being all of Premises A and Tract 2 and part of Tract 1 in a deed dated, December 22, 2014, from Rockwood Pigments NA to Excalibur Realty Company, which is recorded among the land records of Prince Georges County, Maryland in liber 36571 at folio 372. The land described above also being all of the lands of Parcel 1 and 2 of a deed dated April 22, 1971, from Prince Georges County, Maryland to Mineral Pigments Company, which is recorded among the land records of Prince Georges County, Maryland in liber 3948 at folio 509.

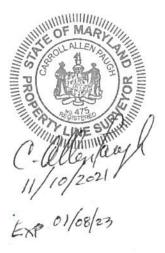
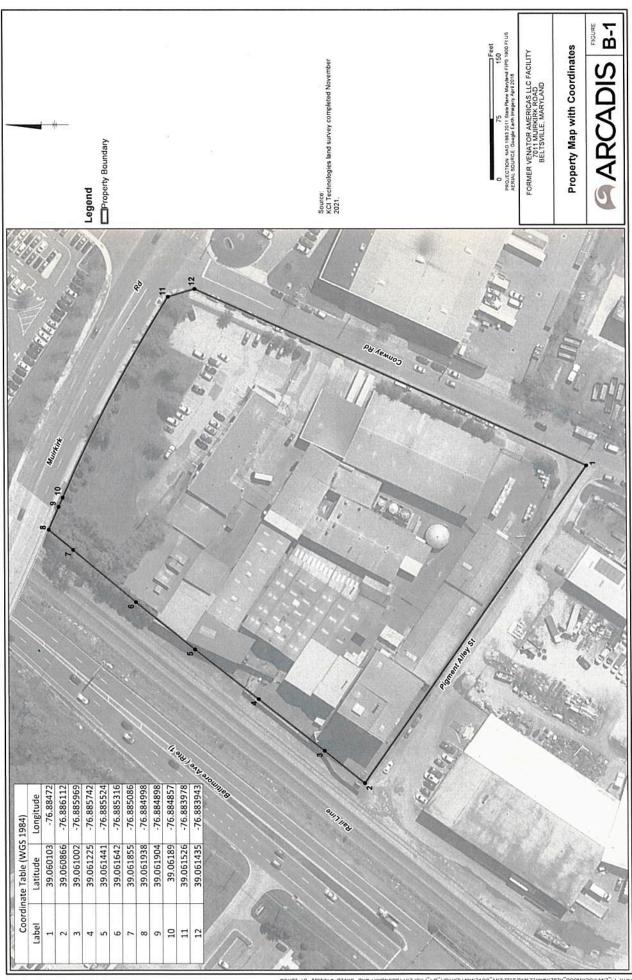






EXHIBIT B

Map of the Property & Location Coordinates



MURGL Y8 2002/01/4 G3VA2 0XM YRAQUUO8YTR3P90R9_1-8_TIBIHX3/TNAN3VC/2VN3/2002/XM3JRAMR3RAUO0/VM3/7 HTA9

EXHIBIT C

Map of the Restricted Areas of Concern & Location Coordinates [Enlarged map of Restricted Areas of Concern]

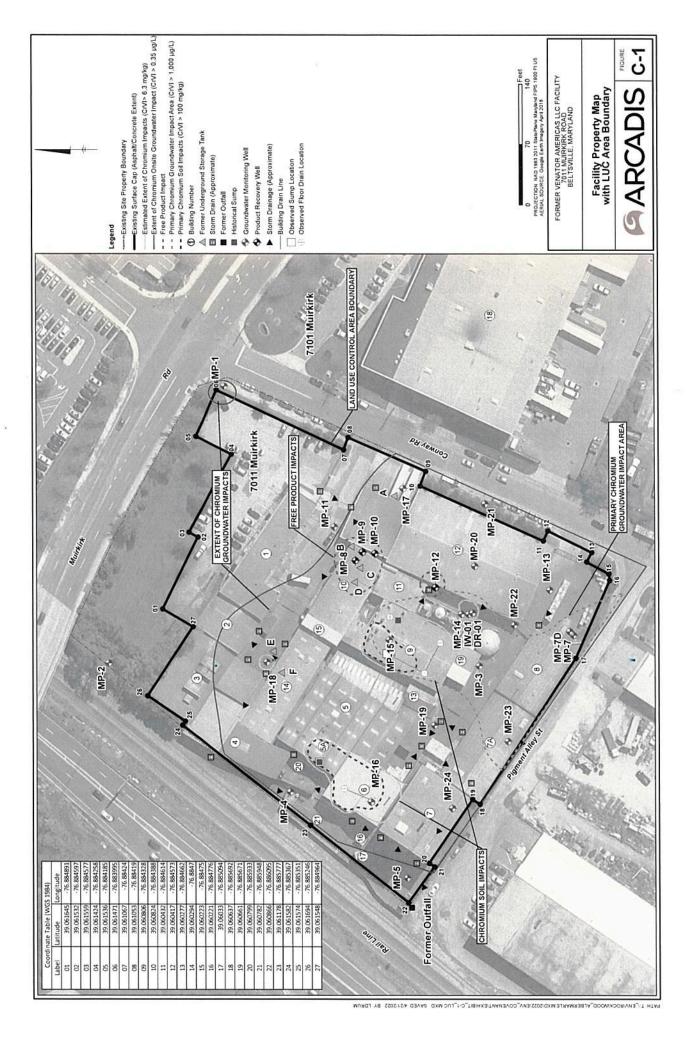


EXHIBIT D

Select Documents from the Administrative Record

Additional information regarding the Property can be found in the following reports:

- Current Conditions Report (Arcadis 2020)
- Corrective Measures Study Report (Arcadis 2021)
- Final Decision (EPA 2021)
- Corrective Action Work Plan (Arcadis 2022)

These reports, and the entirety of the Administrative Record, may be viewed by contacting EPA at the email address listed in Paragraph 13 of this Environmental Covenant.

Additional information and documents can be found on EPA's website: <u>https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-venator-americas-llc-</u> formerly-huntsman-p-americas

EXHIBIT E

Material Management Plan

ARCADIS

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Albemarle Corporation

Material Management Plan

Former Venator Americas LLC Plant 7011 Muirkirk Road Beltsville, Maryland

April 4, 2022

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Material Management Plan

Former Venator Americas LLC Plant 7011 Muirkirk Road Beltsville, Maryland

April 4, 2022

Prepared By: Arcadis U.S., Inc. 7550 Teague Road, Suite 210 Hanover Maryland 21076 Prepared For: Trey Fortenberry Corporate Environmental Specialist Albemarle Corporation

Our Ref: 30125496

Moh Mohiuddin, PhD, PE, BCEE Program Coordinator

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John Cherry Project Manager

matthe C. mc Caughy

Matthew C. McCaughey Technical Manager

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Figure

Figure 1 Facility Layout

Attachment

Attachment 1 Site Inspection Form

Acronyms and Abbreviations

Albemarle	Albemarle Corporation
Arcadis	Arcadis U.S., Inc.
EPA	Environmental Protection Agency
HASP	Health and Safety Plan
LUC	Land Use Control
MDE	Maryland Department of Environment
MMP	Material Management Plan
OSHA	Occupational Safety and Healthy Act
site	former Venator Americas LLC Plant, located at 7011 Muirkirk Road, Beltsville, Maryland
U.S.	United States

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1 Introduction

On behalf of Albemarle Corporation (Albemarle), Arcadis U.S., Inc (Arcadis) has prepared this Material Management Plan (MMP) for the former Venator Americas LLC Plant, located at 7011 Muirkirk Road, Beltsville, Maryland (site). Management of chromium-related environmental impacts are overseen by the United States Environmental Protection Agency (EPA) Region III Resource Conservation and Recovery Act Corrective Action Program. This MMP is an administrative control based on the Final Decision (EPA 2021).

1.1 Property Description

The site is located approximately 2 miles north of Beltsville, Maryland at 7011 Muirkirk Road. This area is generally industrial and commercial in use, with railroad tracks and Baltimore Avenue (Route 1) to the west, Muirkirk Road to the north, Conway Road to the east, and an industrial park to the south (Figure 1). The site was used for the blending, mixing, and manufacturing of mineral pigments. Operations at the site ceased in 2019 and the current owner of the site (Excalibur Realty, a subsidiary of Albemarle) never operated at the site.

The approximately 5-acre site encompasses two tax parcels with 19 vacant buildings previously used for manufacturing, storage, office, and laboratory space. Building footprints range from approximately 1,000 to 20,000 square feet. The remainder of the site consists of asphalt-paved parking lots and grassy, landscaped areas. The approximate site boundary is shown on Figure 1.

1.2 Document Purpose

This MMP describes how to effectively manage worker exposure to potentially contaminated subsurface soils and groundwater based on the current land use and site layout. If building renovations or redevelopment activities involving subsurface intrusion are performed in the future, a site-specific work plan will be prepared by the current property owner for regulatory approval.

1.3 Land Use Control Boundary

A land use control (LUC) boundary was implemented at the site to prevent exposure to or cross-media transfer of hexavalent chromium in soil exceeding cleanup levels, and to limit soil to groundwater migration. The LUC boundary, shown on Figure 1, includes maintaining the surface covers over impacted areas and security fencing. Future soil disturbances within the LUC boundary could cause additional release of chromium-impacted substances into the environment and could adversely impact human health and welfare. Therefore, any soil excavation or disturbance below the ground surface within the LUC boundary is required to be conducted in accordance with the current MMP approved by the regulators.

Groundwater impacts for chromium exceed a concentration of 1,000 µg/L in a portion of the groundwater underlying the Property (Figure 1). Groundwater at the Property shall not be used for any purpose other than the operation, maintenance, and monitoring activities required by 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 Final Remedy, and EPA provides prior written approval for such use. In addition, the facility is impacted with residual free product from historical underground storage tank release(s), which are regulated by Maryland Department of Environment (MDE)'s Oil Control Program. The free product impacts are within the land use control boundary as

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Material Management Plan

shown on Figure 1. Additional information regarding groundwater impacts can be found in the documents listed in Section 1.4.

1.4 Important Documents

Additional information regarding the site can be found in the following reports:

- Current Conditions Report (Arcadis 2020)
- Corrective Measures Study Report (Arcadis 2021)
- Final Decision (EPA 2021)
- Corrective Action Work Plan (Arcadis 2022)

Additional information and documents can be found on the EPA website:

https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-venator-americas-llc-formerly-huntsmanp-americas

2 Site Inspection and Reporting

A visual inspection of the LUC boundary will be conducted within a calendar year to identify and document any ground disturbance or excavation activities, as well as document the overall condition of the existing surface cap. The annual site inspection will be performed by an environmental consultant using the site inspection form provided in Attachment 1. Documentation of the annual inspection will be submitted to the EPA no later than January 30 of the following calendar year, with recommendations for surface cover maintenance/repairs if needed. This document will be updated, as needed, if visual inspection of the LUC boundary results in additional recommendations that would affect future intrusive work at the site.

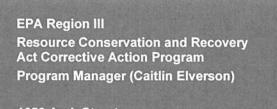
3 Future Intrusive Work Procedures

This section describes the workflow process for performing future intrusive work within the LUC boundary (Figure 1). These procedures are generalized by design because the location and specific type of work activity (e.g., trenching, demolition) has not been determined. This section is included in the MMP because the property owner (including their tenants and contractors) may need to perform intrusive work within the LUC boundary in the future as part of maintenance, repair, or redevelopment activities. In addition, it is recognized that the one or more existing buildings could be demolished as part of future site redevelopment activities under an industrial/ commercial land use scenario.

3.1 Notifications

3.1.1 Request for Intrusive Work

If any parties plan to excavate or perform any intrusive work onsite within the LUC boundary, the owner of the site (or parties acting on the owners' behalf) must provide a written request to the following regulatory agency at least 30 days prior to the planned start of work:



1650 Arch Street Philadelphia, PA 19103-2029 Telephone: 215-814-3213

Requests should include a work plan specifying the timing of the planned activities, purpose of work, and extent and types of material disturbance; and describing proposed methods to complete the work, planned disposal method and location, source and certification for clean fill (if fill will be used), and the contractor Health and Safety Plan (HASP). Requests for intrusive work must be approved in writing by the EPA prior to start of work.

For emergency maintenance with excavations, a simple notification, e.g., telephone call and email, will be given within 24 hours after the emergency condition occurs. The property owner will provide a periodic update on excavation activities. If required, a written description of the excavation activities will be sent within 5 days after the emergency condition occurs. In addition, if more than 200 cubic yards of soil is to be excavated during the emergency excavation activities, documentation will be prepared and submitted within 45 days after the emergency condition occurs.

Notifications are not required outside of the LUC boundary (i.e., areas that are not currently paved/covered).

3.1.2 Utility Markout

Miss Utility/One-Call as required by Maryland State Law prior to the planned start of intrusive work. It is also recommended that a private utility locator be contacted prior to the start of work because Miss Utility does not conduct utility markouts on private property.

3.1.3 Completion Submittals

Within 45 days of work completion, the property owner must provide a Construction Completion Report to EPA, which will include, but is not limited to, the following:

- Quantity of material (e.g., soil, concrete) removed
- Excavated material disposal location
- Manifest documentation
- Analytical results
- Type of fill used and source
- Limits of excavation
- Photographic documentation of site restoration activities.

3.2 Material Handling and Disposal

During intrusive activities, engineering controls will be established around the work zone to prevent unauthorized personnel from entering the intrusive work area. Excavation workers and authorized personnel will use appropriate personal protective equipment as specified in the HASP, discussed in Section 4.2, to be prepared by the contractor.

Excavated or disturbed materials will be disposed of at a permitted solid waste receiving facility. Composite waste characterization samples will be collected and analyzed for disposal parameters in accordance with the requirements of the solid waste receiving facility, as further discussed in Section 3.2.4.

3.2.1 Dust and Odor Control

Trucks equipped with tarps will be used for the transportation and offsite disposal of impacted soil, concrete, and/or other construction debris. Soil stockpiles will be covered with tarps and/or polyethylene sheeting when not in use.

Subsurface contractors will use both visual and real-time air monitoring to monitor current conditions in accordance with the site HASP (discussed in Section 4.1). If elevated dust or odors are detected, the work will temporarily cease while appropriate engineering controls, in accordance with best management practices as determined by the contractor, are put in place to address the concern.

3.2.2 Traffic Control and Road Maintenance

Trucks and subsurface excavation equipment will enter the site via a designated entrance. All truck/excavation equipment will be staged onsite and loaded in order of arrival. Truck and excavation equipment tires/treads will be broom cleaned or equivalent prior to exiting the site via the construction entrance; therefore, trackout of sediment

onto offsite streets, other paved areas, and sidewalks will be minimized. If material has been tracked out from the site onto the surface of offsite streets, other paved areas, and sidewalks, the deposited material will be removed as soon as possible.

3.2.3 Processing and Handling of Concrete Material

If subsurface activities require the removal of concrete surface cover, this material will be considered potentially impacted from contact with impacted soil and will undergo waste characterization and disposal. Concrete/asphalt will not be recycled. In keeping with LUCs implemented at the site, any penetration to concrete surfaces should be made in a way to minimize damage. Clean cuts that can be more easily repaired, including saw cutting and concrete coring, should be prioritized.

3.2.4 Waste Characterization and Disposal

Excavated material will be placed within an appropriate staging area while waste characterization results are pending. Stockpiled material intended for off-site disposal will be removed from the site as soon as possible, but not longer than 180 days pursuant to applicable solid waste requirements and no longer than 90 days for material that is characterized as hazardous waste pursuant to applicable hazardous waste requirements. Stockpiling must compile with waste accumulation standard in Title 40 of the Code of Federal Regulations (40 CFR). A copy of the approved waste profiles will be maintained while field work is in progress. Once the waste material has been characterized and profiled, the material will be disposed of at an appropriately permitted waste disposal facility. To the extent possible, pre-excavation waste characterization will be performed to minimize the duration of onsite stockpiling of excavated materials. Waste characterization samples will be collected for Toxicity Characteristic Leaching Procedure analysis of hexavalent chromium. Additional waste characterization samples may be collected if required by the disposal facility.

3.2.5 Handling and Stockpiling of Excavated Materials

Excavated materials will be staged designated areas, outside the limits of any dewatering activities. Soil staging areas will be the primary location for materials segregation, stockpiling, sampling, and loading for disposal. Soils will either be directly loaded into appropriate transport vehicles (e.g., lined dump trailers or roll-offs) or temporarily staged onsite in a staging area. Staging areas will be lined with 40-millimeter high density polyethylene sheeting. A minimum six-inch berm overlain by the polyethylene sheeting will be constructed around the perimeter of the staging area to minimize storm water runon and runoff.

Staged soils, or those that will remain onsite, will be covered with 10-millimeter reinforced polyethylene sheeting until transported offsite to control potential emissions or runoff. The sheeting will be weighed down by a sufficient amount of sandbags to prevent movement of the cover. The staging area will be continuously covered with the sheeting except while the soils are actively being placed or removed.

3.2.6 Equipment and Personnel Decontamination

Equipment and vehicles that have come in contact with impacted soils will be decontaminated. The decontamination pads will be bermed and lined with impermeable barrier. The decontamination area will be sloped to a sump to allow for collection of decontamination water. Water collected from the decontamination activities will be containerized and subsequently treated/disposed of offsite.

All material used in equipment decontamination, including but not limited to: detergent solution, rinsate, rinse water, towels, disposable equipment, and polyethylene sheeting will be collected and disposed of properly.

Specific personnel decontamination areas will be designated in the field in accordance with the OSHA regulations. Personal protective equipment will be disposed of in accordance with MDE rules and regulations.

3.3 Site Regrading and Restoration

During site regrading and restoration activities, clean fill will be used as backfill material in the excavation. Clean fill will be certified by the supplier and/or demonstrated to meet the requirements of the MDE Category 2 - Non-Residential Restricted Use Soil and Fill Material screening criteria based on analytical testing. Fill material that contains total and hexavalent chromium levels below regional background concentrations will be considered suitable for use as backfill. Site soils will not be used for regrading, restoration, and/or backfilling activities unless specifically approved by the EPA.

Excavations will be backfilled with clean fill and restored to original surface cover (i.e., asphalt and/or concrete). Clean fill will be natural mineral soil, void of debris. General backfill may contain up to 5 percent organic material. General backfill will be sampled and results will be maintained at the site. Fill material will be spread in 12-inch lifts and compacted with a minimum of four passes of a vibratory compactor or approved equivalent.

4 Health and Safety Considerations

This section discusses required training for site workers and the preparation of a site-specific HASP.

4.1 Health and Safety Regulations

Site workers performing intrusive activities will be required to have the appropriate Occupational Safety and Health Administration (OSHA) in accordance with OSHA regulation (29 Code of Federal Regulations 1910.120).

4.2 Contractor Health and Safety Plan

In accordance with OSHA regulation (29 Code of Federal Regulations 1910.120), a site-specific HASP must be prepared prior to initiation of subsurface intrusive activities. The HASP must be prepared by personnel who are familiar with current subsurface media environmental quality and the particular physical hazards that may be expected. The HASP must also abide by applicable Code of Maryland regulations. The HASP must incorporate appropriate personal protective equipment, air monitoring, and engineering controls (e.g., remote-controlled excavation equipment) based on current environmental media quality. Personnel will be required to review and sign the HASP prior to entering a subsurface intrusive work area. New staff will be instructed to acknowledge understanding of the HASP, prior to accessing the site. Site workers will be subject to medical monitoring under OSHA regulation 1910.134(b)(10), which will be detailed in the HASP. In addition to the requirements of OSHA regulation (29 Code of Federal Regulations 1910.120), the HASP will also address the OSHA hexavalent chromium standards for workers (29 Code of Federal Regulations 1910.1026) and include:

- Health risks associated with chemicals of concern (hexavalent chromium)
- Task hazards associated with excavation activities
- Personal protective equipment
- Engineering controls for fugitive emissions
- Air monitoring equipment
- Emergency procedures, routes, and contacts.

Material Management Plan

5 References

Arcadis. 2020. Current Conditions Report. Former Rockwood Pigments Plant. Beltsville, MD. March 11.
Arcadis. 2021. Corrective Measures Study Report. Former Rockwood Pigments Plant. Beltsville, MD. March 29.
Arcadis. 2022. Corrective Action Work Plan. Former Venator Americas LLC Plant. Beltsville, MD. February 21.
EPA. 2021. Final Decision. Former Rockwood Pigments Plant. Beltsville, March 17.

Figure

