

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION III
 FOUR PENN CENTER – 1600 JOHN F. KENNEDY BLVD.
 PHILADELPHIA, PENNSYLVANIA 19103-2852**

IN THE MATTER OF:)
)
)
 Excalibur Realty Company)
 Venator Americas, LLC Beltsville Plant)
 7011 Muirkirk Road)
 Beltsville, Maryland, 20705)
)
 EPA I.D. No. MDD062011796)
)
)
)
 Excalibur Realty Company)
)
 Respondent)
)
 Proceeding under Section 3008(h))
 of the Resource Conservation and)
 Recovery Act, 42 U.S.C. § 6928(h))
)
)

RCRA Docket No. RCRA-03-2022-0138CA

**ADMINISTRATIVE ORDER
ON CONSENT**

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I. JURISDICTION

1. This Administrative Order on Consent (“Order”) is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and Excalibur Realty Company (“Excalibur” or “Respondent”) regarding the former Venator Americas, LLC Beltsville Plant, located at 7011 Muirkirk Road Beltsville, Maryland, 20705 (“the Facility”). This Order provides for the performance of corrective action activities at or in connection with the Facility. A map that generally depicts the Facility is attached hereto as Appendix A.

2. This Order is issued under Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (“RCRA”), as amended by the Hazardous and Solid Waste Amendments of 1984, as amended 42 U.S.C. § 6928(h). The Administrator of EPA has delegated the authority to issue orders under Section 3008(h) to the Regional Administrator of Region III by EPA Delegation Nos. 8-31, dated Jan. 17, 2017, and 8-32, dated May 11, 1994, and this authority has been further delegated by the Regional Administrator for Region III to the Director of the Land, Chemical and Redevelopment Division (“LCRD”) by EPA Delegations Nos. 8-31 and 8-32, both dated April 15, 2019.

3. EPA granted the State of Maryland (“the State”) authorization to operate a state hazardous waste program in lieu of the federal program, pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), effective February 11, 1985 (50 FR 3511). Subsequent to the February 11, 1985 authorization, EPA granted authorization for revisions to the State’s authorized hazardous waste program effective July 31, 2001 and September 24, 2004. The State, however, does not have authority to enforce Section 3008(h) of RCRA. The State has been given notice of the issuance of this Order.

4. EPA and Respondent recognize that this Order has been negotiated in good faith. Respondent consents to, and agrees not to contest, EPA’s jurisdiction to issue this Order or to enforce its terms. Further, Respondent will not contest EPA’s jurisdiction to: compel compliance with this Order in any subsequent enforcement proceedings, either administrative or judicial; require Respondent’s full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order. Respondent waives any right to request a hearing on this Order pursuant to Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing under Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), as an Administrative Order on Consent issued pursuant to Section 3008(h) of RCRA, 42 U.S.C. § 6928(h).

5. Respondent waives any and all remedies, claims for relief, and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Chapter 7 of the Administrative Procedures Act, 5 U.S.C. §§ 701-706, and 40 C.F.R. Part 24 providing for review of final agency action.

II. PARTIES BOUND

6. This Order is binding upon EPA and upon Respondent and its agents, successors, and assigns. Any change in ownership or corporate status of a Respondent including, but not

limited to, any transfer of assets or real or personal property, shall not alter Respondent's responsibilities under this Order. Any conveyance of title, easement, or other interest in the Facility shall not affect Respondent's obligations under this Order.

7. The undersigned representative of Respondent certifies that she or he is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.

8. Respondent shall provide a copy of this Order to each contractor hired to perform the Work and to each person representing Respondent with respect to the Facility or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. Respondent or its contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the Work required by this Order. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Order.

III. STATEMENT OF PURPOSE

9. In entering into this Order, the mutual objectives of EPA and Respondent are:

a. To have Respondent implement the corrective measures for the Facility, as selected in the November 10, 2021, Final Decision and Response to Comments ("FDRTC"), attached hereto as Appendix B and to have Respondent perform, if appropriate, interim measures at the Facility as necessary to protect human health and the environment; and

b. To have Respondent perform any other activities necessary to correct or evaluate actual or potential threats to human health or the environment resulting from the release or potential release of Hazardous Waste at or from the Facility.

IV. DEFINITIONS

10. Unless otherwise expressly provided in this Order, terms used in this Order that are defined in RCRA, 42 U.S.C. §§ 6901-6992k, shall have the meaning assigned to them in RCRA. Whenever terms listed below are used in this Order or its Appendices, the following definitions shall apply solely for purposes of this Order:

"Areas of Concern" shall mean any area of the Facility under the control or ownership of the owner or operator where a release to the environment of Hazardous Waste has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration of the release.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9601-9675.

"Day or day" shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall mean the date EPA signs this Order.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“Hazardous Constituents” shall mean those constituents listed in Appendix VIII to 40 C.F.R. Part 261 or any constituent identified in Appendix IX to 40 C.F.R. Part 264.

“Hazardous Waste(s)” shall mean any hazardous waste as defined in Sections 1004(5) and 3001 of RCRA, 42 U.S.C. §§ 6903(5) and 6921. This term includes Hazardous Constituents as defined above.

“Institutional Controls” or “ICs” shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices of contamination, notices of administrative action, or other notices that: limit land, water, or other resource use to minimize the potential for human exposure to contaminants at or in connection with the Facility; limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the Work; or provide information intended to modify or guide human behavior at or in connection with the Facility.

“Order” shall mean this Administrative Order on Consent and any appendices attached hereto (listed in Section XXIII (Integration/Appendices)). Deliverables approved, conditionally-approved, or modified by EPA also will be incorporated into and become enforceable parts of this Order.

“Paragraph” shall mean a portion of this Order identified by an Arabic numeral or an upper or lower case letter.

“Parties” shall mean EPA and Respondent.

“Proprietary Controls” or “PCs” shall mean easements or covenants running with the land that: (i) limit land, water or other resource use and/or provide access rights; and (ii) are created pursuant to common law or statutory law by an instrument that is recorded by the owner in the appropriate land records office.

“RCRA” shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901-6992, as amended by the Hazardous and Solid Waste Amendments of 1984 (also known as the Resource Conservation and Recovery Act).

“Respondent” shall mean Excalibur Realty Company.

“Section” shall mean a portion of this Order identified by a Roman numeral.

“Solid Waste Management Unit(s)” or “SWMU(s)” shall mean any discernable unit(s) at which solid wastes have been placed at any time irrespective of whether the unit was intended for the management of solid waste or Hazardous Waste. Such units include any area at a Facility where solid wastes have been routinely or systematically released.

“State” shall mean the State of Maryland.

“Scope of Work” or “SOW” shall mean a document or documents prepared by EPA describing the activities Respondent must perform to implement the Work required by this Order.

“Transfer” shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Work” shall mean all activities and obligations Respondent is required to perform under this Order, except those required by Section XII (Record Retention).

V. FINDINGS OF FACT

11. Respondent neither admits nor denies the following Findings of Fact:

a. Respondent is a corporation and is a person as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

b. Respondent is the owner of a former Hazardous Waste management facility located at 7011 Muirkirk Road Beltsville, Maryland 20705.

c. The Facility was a facility authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e), for purposes of Section 3008(h) of RCRA, 42 U.S.C. § 6928(h).

d. The FDRTC selecting the Final Remedy for the Facility was issued on November 10, 2021. The environmental history and investigations conducted at the Facility are further described in the FDRTC.

e. The FDRTC incorporated by reference herein as though fully set forth at length and is attached herein and made a part hereof as Appendix B to this Order.

f. On September 7, 2022, Respondent executed and recorded in the Prince George’s County, Maryland property records, an environmental covenant (“Covenant”) on the title to the Facility property pursuant to the Maryland Uniform Environmental Covenants Act, §§ 1-801 through 1-815 of the Environmental Article, Annotated Code of Maryland (“UECA” (Instrument Number MDD062011796). The Covenant requires that EPA be granted full right of access for implementation and enforcement of the Covenant.

g. The Covenant includes the following restrictions and requirements:

(1) 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;

(2) Groundwater Use. 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;

(3) Material Management Plan. The Land Use Control ("LUC") Area includes existing paved surfaces including the "Building 6 Area" and "Building 9 Area", as shown on Exhibit C of the Environmental Covenant (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 Exhibit D of the Environmental Covenant (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 Exhibit E of the Environmental Covenant. 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;

(4) Existing Surface Coverage and Maintenance. 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 of the Environmental Covenant. 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 of the Environmental Covenant as approved in advance by EPA, consistent with sound engineering practice, the then-current Property use, and applicable laws; and

(5) Existing Security Fence. 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.

h. Based on the findings above, EPA has determined that there are potential adverse environmental or human health impacts associated with the Hazardous Wastes which are present at or released at or from the Facility.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

12. EPA makes the following Conclusions of Law and Determinations to which Respondent neither admits nor denies:

VII. EPA hereby determines that there is or has been a release of Hazardous Waste within the meaning of 3008(h) of RCRA, 42 U.S.C. § 6928(h), into the environment from the Facility and that the corrective action and/or other response measures required by this Consent Order are necessary to protect human health or the environment. **DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND EPA PROJECT COORDINATOR**

13. Respondent has designated, and EPA has not disapproved, the following individual as Project Coordinator, who shall be responsible for administration of all actions by Respondent required by this Order: [Trey Fortenberry, Corporate Environmental Specialist, 42504250 Congress Street, Suite 900, Charlotte, North Carolina, 28209, (980) 999-5195, trey.fortenberry@albemarle.com].

The Project Coordinator must have sufficient expertise to coordinate the Work and must be present at the Facility or readily available during implementation of the Work. If EPA disapproves of the designated Project Coordinator, Respondent shall designate and notify EPA of an alternate within 21 days. EPA has designated Caitlin Elverson of the Land, Chemicals and Redevelopment Division, Region III as EPA’s Project Coordinator. EPA and Respondent shall

have the right, subject to this Paragraph, to change their designated Project Coordinators. Respondent shall notify EPA 14 days before such a change is made. The initial notification by Respondent of a change in the Project Coordinator may be made orally, but shall be promptly followed by a written notice.

14. Respondent shall retain one or more contractors to perform the Work and shall, within 14 days after the Effective Date, notify EPA of the name(s), title(s), and qualifications of such contractor(s). Respondent shall also notify EPA of the name(s), title(s), and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 60 days prior to commencement of such Work. EPA retains the right to disapprove any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 60 days after EPA's disapproval. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Mar. 2001, reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA review for verification that such persons meet objective assessment criteria (*e.g.*, experience, capacity, technical expertise) and do not have a conflict of interest with respect to the project.

15. Except as otherwise provided in this Order, Respondent shall direct all submissions required by this Order to EPA's Project Coordinator in accordance with Section XIII (Reporting and Document Certification). EPA's Project Coordinator has the authority to oversee Respondent's implementation of this Order. The absence of EPA's Project Coordinator from the Facility shall not be cause for the stoppage of Work unless specifically directed by EPA's Project Coordinator.

VIII. WORK TO BE PERFORMED

16. General Work Requirements

a. Pursuant to Section 3008(h) of RCRA, Respondent agrees to and is hereby ordered to perform the Work in accordance with any Scope of Work ("SOW"), workplan, or schedule developed pursuant to this Order. Respondent shall perform all Work undertaken pursuant to this Order in a manner consistent with RCRA and other applicable federal and state laws and their implementing regulations; applicable EPA guidance documents, including but not limited to those available at: <https://www.epa.gov/hwcorrectiveactionsites/corrective-action-resources-specific-epas-region-3>.

b. For any regulation or guidance referenced in the Order, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

c. EPA acknowledges that Respondent may have completed some of the tasks required by this Order. Respondent may also have made available some of the information and data required by this Order. This previous work may be used to meet the requirements of this Order upon submission to and formal approval by EPA.

d. Within 120 days after the Effective Date, Respondent shall submit to EPA a Health and Safety Plan (“HASP”) that describes all activities to be performed to protect all persons on and off site from physical, chemical, and all other hazards posed by the Work. Respondent shall develop the HASP in accordance with EPA’s Emergency Responder Health and Safety and Occupational Safety and Health Administration (“OSHA”) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover all Work and should be updated, as appropriate, to cover activities after Work completion. EPA does not approve the HASP but will review it to ensure that all necessary elements are included and that the HASP provides for the protection of human health or the environment.

e. All written documents prepared by Respondent pursuant to this Order shall be submitted according to the procedures set forth in Section XIII (Reporting and Document Certification). With the exception of progress reports and the HASP, all such submittals will be reviewed and approved by EPA in accordance with Section XIV (Agency Approvals/Additional Work/Modifications).

f. Respondent will communicate frequently and in good faith with EPA to assure successful completion of the requirements of this Order. At a minimum, Respondent shall provide EPA with annual progress reports commencing on the last day of the month that is one year after the Effective Date and throughout the period that this Order is effective.

g. If, at any time while performing Work, Respondent identifies an immediate or potential threat to human health or the environment, discovers new releases of Hazardous Waste, or discovers new solid waste management units (“SWMUs”) or Areas of Concern not previously identified, Respondent shall notify EPA orally within 48 hours of such discovery, and in writing within five days after such discovery, summarizing the immediacy and magnitude of the potential threat(s) to human health or the environment. Upon written request of EPA, Respondent shall submit to EPA any relevant document (e.g., a revised workplan) that identifies necessary actions to mitigate the newly identified circumstances. If EPA determines that immediate action is required, EPA’s Project Coordinator may orally agree to the proposed necessary actions prior to EPA’s receipt of the documentation. In this situation, Respondent may have additional notification or other obligations under RCRA, CERCLA, or another legal authority.

17. Phases of Corrective Action

a. Corrective Measures Implementation (“CMI”)

(1) Respondent shall implement the EPA-approved Correction Action Workplan dated March 2, 2022 according to the approved project schedule therein.

b. CMI Assessment Report

Every five years from the Effective Date of this Order, Respondent shall submit to EPA for review and approval a CMI Assessment Report. The CMI Assessment Report shall include whether each component of the Order is being complied with, whether human health and the environment continue to be protected from unacceptable risk if any posed by exposure if any to release addressed by this Order, whether the Final Remedy or any amendment thereto is expected to achieve media cleanup objectives within a reasonable time frame given existing and reasonably anticipated future circumstances, whether revisions to the Final Remedy are recommended, and/or whether revisions to the groundwater monitoring plan are needed.

c. Interim Measures (“IM”)

(1) Commencing on the Effective Date of this Order and continuing thereafter, in the event Respondent identifies an immediate or potential threat to human health and/or the environment at or from the Facility, or discovers new releases of Hazardous Waste and/or Hazardous Constituents at or from the Facility not previously identified, Respondent shall notify the EPA Project Coordinator orally within 48 hours of discovery and notify EPA in writing within five calendar days of such discovery summarizing the immediacy and magnitude of the potential threat(s) to human health or the environment. Upon written request of EPA, Respondent shall submit to EPA for approval an IM Work Plan in accordance with the IM SOW. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize Respondent to act prior to EPA’s receipt of the IM Work Plan.

(2) Commencing on the Effective Date of this Order and continuing thereafter, if EPA identifies an immediate or potential threat to human health and/or the environment at the Facility or discovers new releases of Hazardous Waste and/or Hazardous Constituents at or from the Facility not previously identified, EPA will notify Respondent in writing. Upon written request from EPA, Respondent within 21 days shall submit to EPA for approval an IM Work Plan in accordance with the IM Scope of Work that identifies interim measures which will mitigate the threat. If EPA determines that immediate action is required, the EPA Project Coordinator may orally require Respondent to act prior to Respondent's receipt of EPA's written notification. All IM Work Plans shall ensure that the interim measures are designed to mitigate immediate or potential threats to human health and/or the environment and should be consistent with the objectives of, and contribute to the performance of the Final Remedy selected by EPA in the FDRTC or any amendment thereto.

(3) Each IM Work Plan shall include the following sections as appropriate and approved by EPA: Interim Measures Objectives, Public Involvement Plan, Data Collection Quality Assurance, Data Management, Design Plans and Specifications, Operation and Maintenance, Project Schedule, Interim Measures Construction Quality Assurance, and Reporting Requirements.

Concurrent with submission of an IM Work Plan, Respondent shall submit to EPA an IM Health and Safety Plan.

IX. QUALITY ASSURANCE

18. As part of the CMI Workplan, Respondent shall include and maintain an updated Quality Assurance Project Plan (“QAPP”) for EPA review and approval. The QAPP shall address all sampling, monitoring, and analyses activities to be performed pursuant to the CMI Workplan.

19. Commencing on the date of EPA approval of the initial QAPP and continuing thereafter, Respondent shall ensure all work performed pursuant to the CMI Workplan is conducted in accordance with the current EPA-approved QAPP.

20. The QAPP shall address quality assurance and quality control procedures for all sampling, monitoring and analyses activities performed pursuant to the CMI Workplan including but not limited to groundwater level monitoring, sample collection, sample analysis, sample management, chain of custody, data management, data validation, and data reporting.

21. Respondent shall develop the QAPP in accordance with “EPA Requirements for Quality Assurance Project Plans,” QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006), “Guidance for Quality Assurance Project Plans,” QA/G-5, EPA/240/R 02/009 (Dec. 2002), and other applicable guidance as identified by EPA. The QAPP also must include procedures:

- a. To ensure that all analytical data used in decision making relevant to this Order are of known and documented quality;
- b. To ensure that EPA and its authorized representatives have reasonable access to laboratories used by Respondent (“Respondent’s Labs”) in implementing the Order;
- c. To ensure that Respondent’s Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
- d. To ensure that Respondent’s Labs perform all analyses using EPA-accepted methods according to the latest approved edition of “Test Methods for Evaluating Solid Waste (SW-846)” or other methods approved by EPA;
- e. To ensure that Respondent’s Labs participate in an EPA-accepted quality assurance/quality control (QA/QC) program or other QA/QC program acceptable to EPA.
- f. For Respondent to provide EPA with notice at least 28 days prior to any sample collection activity;
- g. For Respondent to provide split samples or duplicate samples to EPA upon request; any analysis of such samples shall be in accordance with the approved QAPP;
- h. For EPA to take any additional samples that it deems necessary;

- i. For EPA to provide to Respondent, upon request, split samples or duplicate samples in connection with EPA’s oversight sampling; and
- j. For Respondent to submit to EPA all sampling and test results and other data in connection with the implementation of this Order.

X. PROPERTY REQUIREMENTS

22. **Agreements Regarding Access and Non-Interference.** Respondent shall, with respect to the Facility: (i) provide EPA and its representatives, contractors, and subcontractors with access at all reasonable times to the Facility to conduct any activity regarding this Order, including those activities listed in Paragraph 22.a (Access Requirements); and (ii) comply with the activity and use limitations in the Covenant and refrain from interfering with the integrity of existing monitoring wells. In addition, Respondent shall, with respect to off-Facility Property where existing monitoring wells within the approved monitoring program are located, use “best efforts” (as defined in Paragraph 23) to secure from Property Owner(s) of such off-Facility Property, an agreement, enforceable by Respondent and by EPA, providing that such Off-site Property Owner(s) (i) provide EPA and its representatives, contractors, and subcontractors with reasonable access at all reasonable times to such off-Facility Property to conduct any activity regarding the Order, including those activities listed in Paragraph 22.a to the extent relevant and applicable to the off-Facility Property (Access Requirements); and (ii) refrain from interfering with the integrity of existing monitoring wells.. Respondent shall provide a copy of such access agreement(s) to EPA.

a. **Access Requirements.** The following is a list of activities for which access is required regarding the Facility:

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to EPA or the State;
- (3) Conducting investigations regarding contamination at r the Facility or off-Facility Property where existing monitoring wells within the approved monitoring program are located;
- (4) Obtaining samples;
- (5) Assessing the need for, planning, or implementing additional corrective action activities at the Facility or off-Facility Property where existing monitoring wells within the approved monitoring program are located;
- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;

(7) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section XI (Access to Information);

(8) Assessing Respondent's compliance with the Order;

(9) Determining whether the Facility property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Order; and

(10) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions and Institutional Controls.

23. **Best Efforts.** As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access or record Institutional Controls that affect the title to the Facility property. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access or recording Institutional Controls that affect the title to the Facility property.

24. If EPA determines that, in addition to the recorded Covenant, ICs in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls, or notices of contamination, notices of administrative action, or other notices are needed, Respondent shall cooperate with EPA's and the State's efforts to record, secure, and ensure compliance with such ICs.

25. **Notice to Successors-in-Title**

a. Within 45 days of the Effective Date of this Order, Respondent shall submit to EPA for review and approval a notice to be recorded in the Facility property records, which would notify successors in title that (1) EPA has determined that corrective action activities are needed at the Facility and (2) that Respondent has entered into an Order requiring implementation of such selected corrective action activities.

b. Within thirty (30) days of EPA's approval of the notice in Paragraph 25, Respondent shall use best efforts, as defined in Paragraph 23, to execute and record the notice with the Recorder's Office in Prince George's County, Maryland and submit to EPA a file-stamped copy of the recorded notice.

c. Respondent shall, prior to entering into a contract to Transfer the Facility, or 60 days prior to Transferring the Facility, whichever is earlier:

(1) Notify the proposed transferee that EPA has determined that corrective action activities are needed at the Facility and that Respondent has

entered into an Order requiring implementation of such corrective action activities; and

(2) Notify EPA and the State of the name and address of the proposed transferee and provide EPA and the State with a copy of the above notice that it provided to the proposed transferee.

26. In the event of any Transfer of the Facility, unless EPA otherwise consents in writing, Respondent shall continue to comply with its obligations under the Order, including its obligation to secure access and ensure compliance with any use restrictions regarding the Facility and to implement, maintain, monitor, and report on ICs.

27. Notwithstanding any provision of the Order, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions and ICs, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statute or regulations.

XI. ACCESS TO INFORMATION

28. Respondent shall provide to EPA, upon request and within a reasonable amount of time, copies of all records, reports, documents, and other information (including in electronic form) (hereinafter referred to as “Records”) within Respondent’s possession or control or that of its contractors or agents relating to activities at the Facility or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also, upon request and within a reasonable amount of time, make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

29. Privileged and Protected Claims

a. Respondent may assert all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, if Respondent complies with Paragraph 29.b and except as provided in Paragraph 29.c.

b. If Respondent asserts such a privilege or protection, Respondent shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, each addressee, and each recipient; a description of the Record’s contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that Respondent claims privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent’s favor.

c. Respondent may make no claim of privilege or protection regarding:

(1) Any data regarding the Facility, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Facility; or

(2) The portion of any Record that Respondent is required to create or generate pursuant to this Order.

30. **Business Confidential Claims.** Respondent may assert that all or part of a Record provided to EPA under this Section or Section XII (Record Retention) is business confidential to the extent permitted by and in accordance with 40 C.F.R. §§ 2.203 and 270.12(a). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Order for which Respondent asserts business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or if EPA has notified Respondent that the Records are not confidential under the standards of 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondent.

31. Notwithstanding any provision on this Order, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under RCRA and any other applicable statutes or regulations.

XII. RECORD RETENTION

32. Record Retention

a. Until ten years after EPA issues the Acknowledgement of Termination pursuant to Paragraph 75, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control or that come into its possession or control, that relate in any manner to this Order or to Hazardous Waste management and/or disposal at the Facility. Respondent must also retain, and instruct its contractors and agents to preserve, for the same time period specified above, all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

b. At the conclusion of this record retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA and except as provided in Paragraph 29 (Privileged and Protected Claims), Respondent shall deliver any such records to EPA within a reasonable amount of time.

c. Respondent certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any

Records (other than identical copies) relating to its potential liability regarding the Facility since notification of potential liability by EPA or the State and that it has fully complied with any and all EPA and State requests for information regarding the Facility pursuant to Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

XIII. REPORTING AND DOCUMENT CERTIFICATION

33. **General Requirements for Deliverables.** Respondent shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 34. All other deliverables shall be submitted to EPA in the electronic form specified by EPA's Project Coordinator. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", Respondent, upon request by EPA, shall send paper copies of such exhibits. All documents submitted pursuant to this Order shall be sent to:

Caitlin Elverson
Telephone: 215-814-5455
E-mail: elverson.caitlin@epa.gov
All electronic messages and submittals additionally are to be submitted to:
R3_RCRAPOSTREM@epa.gov

Documents to be submitted to Respondent shall be sent to:

Project Coordinator:

Trey Fortenberry / Corporate Environmental Specialist
Albemarle Corporation
4250 Congress Street, Suite 900 Charlotte, North Carolina 28209
Telephone: (980) 999-5195
Email: trey.fortenberry@albemarle.com

In addition, documents pursuant to Section XV (Financial Assurance) and any notice of destruction of documents pursuant to Section XII (Record Retention) shall be submitted to EPA's Project Coordinator.

34. **Technical Specifications.**

a. Sampling and monitoring data should be submitted in standard Electronic Data Deliverable ("EDD") format. Other delivery methods may be allowed upon EPA approval if electronic direct submission presents a significant burden or as technology changes.

b. Spatial data, including spatially-referenced data and geospatial data, should be submitted:

(1) in the ESRI File Geodatabase format; and

(2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (“NAD83”) or World Geodetic System 1984 (“WGS84”) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (“FGDC”) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (“EME”), complies with these FGDC and EPA metadata requirements and is available at <https://edg.epa.gov/EME/>.

c. Each file must include an attribute name for each unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.

d. Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Facility.

35. All deliverables that are submitted pursuant to Section VIII (Work to be Performed) must be signed by Respondent’s Project Coordinator, or other responsible official of Respondent, and must contain the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____
Name: _____
Title: _____
Date: _____

XIV. AGENCY APPROVALS/ADDITIONAL WORK/MODIFICATIONS

36. EPA Approvals

a. Initial Submissions

(1) After review of any deliverable that is required to be submitted for EPA approval under this Order, EPA will: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions;

(iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

b. **Resubmission.** Upon receipt of a notice of disapproval under Paragraph 36.a (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 36.a(1), Respondent shall, within 30 days, or ten days in the case of an IM Workplan, or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may:

- (1) Approve, in whole or in part, the resubmission;
- (2) Approve the resubmission upon specified conditions;
- (3) Modify the resubmission;
- (4) Disapprove, in whole or in part, the resubmission, requiring Respondent to correct the deficiencies; or
- (5) Any combination of the foregoing.

c. **Implementation.** Upon approval, approval upon conditions, or modification by EPA under Paragraph 36.a or 36.b, of any such deliverable, or portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and become an enforceable part of this Order; and (2) Respondent shall take any action required by the deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under Paragraph 36.a or resubmitted under Paragraph 36.b does not relieve Respondent of any liability for stipulated penalties under Section XVI (Delay in Performance/Stipulated Penalties).

37. **Additional Work**

a. EPA may determine that certain tasks, including investigatory work, engineering evaluation, procedure/methodology modifications, or land, water, or other resource use restrictions or ICs, are necessary in addition to or in lieu of the tasks included in any EPA-approved workplan to meet the purposes set forth in Section III (Statement of Purpose). If EPA makes such a determination, EPA will notify Respondent in writing. Unless otherwise stated by EPA, within 45 days after the receipt of such determination, Respondent shall submit for EPA approval a workplan for the Additional Work. The workplan shall conform to the applicable requirements of Section VIII (Work to Be Performed). Upon approval of the workplan by EPA, Respondent shall implement it in accordance with the schedule and provisions contained therein.

This Section does not alter or diminish EPA's Project Coordinator's authority to make oral modifications to any plan or schedule pursuant to Paragraph 38.a.

38. Modifications

a. EPA's Project Coordinator may modify any workplan, schedule, or SOW, in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's Project Coordinator's oral direction. Any other requirements of this Order may be modified in writing by mutual agreement of the parties.

b. If Respondent seeks permission to deviate from any approved workplan, schedule, or SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from EPA's Project Coordinator pursuant to Paragraph 38.a.

c. No informal advice, guidance, suggestion or comment by EPA's Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Order, or to comply with all requirement of this Order, unless it is modified in writing pursuant to Paragraph 38.a.

XV. FINANCIAL ASSURANCE

39. Commencing annually from the effective date of EPA approval of the initial financial assurance instrument under this Order, Respondent shall submit to EPA certification and supporting documentation that financial assurance to address work remaining in this Order remains in place, and that such financial assurance is valid, accessible to EPA, and reasonably addresses the cost of work remaining in this Order.

40. Estimated Cost of the Work

a. As part of the CMI Workplan submitted in accordance with Paragraph 17.a, Respondent shall submit to EPA for review and approval detailed written estimates, in current dollars, of the cost of hiring a third party to perform the Work to be Performed under this Order (hereafter "Estimated Cost of the Work"). The Estimated Cost of the Work shall account for the total costs of the work activities that they cover, as described in Section VIII and the SOW(s), and any EPA-approved work plan(s), including any necessary long term costs, such as operation and maintenance costs and monitoring costs. A third party is a party who (i) is neither a parent nor a subsidiary of Respondent and (ii) does not share a common parent or subsidiary with Respondent. The cost estimates shall not incorporate any salvage value that may be realized from the sale of wastes, facility structures or equipment, land or other assets associated with the Facility.

b. Respondent shall annually adjust the Estimated Cost of the Work for inflation within 30 days before the close of Respondent's fiscal year until the Work required by this Order is completed. In addition, Respondent shall adjust the Estimated Cost of the Work if

EPA determines that any Additional Work is required, pursuant to Paragraph 37, or if any other condition increases the cost of the Work to be performed under this this Order.

c. Respondent shall submit each Estimated Cost of the Work to EPA for review annually within 30 calendar days before the close of Respondent's fiscal year. EPA will review each cost estimate and notify Respondent in writing of EPA's approval, disapproval, or modification of the cost estimate.

41. Assurances of Financial Responsibility for Completing the Work

a. Within sixty (60) days after EPA approves the initial Estimated Cost of the Work, Respondent shall establish financial assurance for the benefit of the EPA. In the event that EPA approval of Respondent's initial Estimated Cost of the Work is not received within thirty (30) days after close of Respondent's fiscal year, Respondent shall establish and maintain the financial assurance in the amount of the Estimated Cost of the Work submitted pursuant to Paragraph 40.a within ninety (90) days of the end of its fiscal year. Respondent shall maintain adequate financial assurance until EPA releases Respondent from this requirement pursuant to Section XXII (Termination). Respondent shall update the financial instrument or financial test demonstration to reflect changes to the Estimated Cost of the Work within ninety (90) days after the close of the Respondent's fiscal year. Respondent may use one or more of the financial assurance forms described in subparagraphs (1) – (6) immediately below. Any and all financial assurance documents shall be satisfactory in form and substance as determined by EPA.

(1) A trust fund established for the benefit of EPA, administered by a trustee;

(2) A surety bond unconditionally guaranteeing performance of the Work in accordance with this Order, or guaranteeing payment at the direction of EPA into a standby trust fund that meets the requirements of the trust fund in subparagraph (1) above;

(3) An irrevocable letter of credit, payable at the direction of the Director, Land, Chemicals and Redevelopment Division, into a standby trust fund that meets the requirements of the trust fund in subparagraph (1) above;

(4) An insurance policy that provides EPA with rights as a beneficiary, issued for a face amount at least equal to the current Estimated Cost of the Work, except where costs not covered by the insurance policy are covered by another financial assurance instrument;

(5) A corporate guarantee, executed in favor of the EPA by one or more of the following: (1) a direct or indirect parent company, or (2) a company that has a "substantial business relationship" with Respondent (as defined in 40 C.F.R. § 264.141(h)), to perform the Work to Be Performed under Section VIII of this Order or to establish a trust fund as permitted by subparagraph (1) above; provided, however, that any company providing such a guarantee shall demonstrate to the satisfaction of the EPA that it satisfies the financial test

requirements of 40 C.F.R. § 264.143(f) with respect to the portion of the Estimated Cost of the Work that it proposes to guarantee; or

(6) A demonstration by Respondent that it meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied.

b. Respondent shall submit all original executed and/or otherwise finalized instruments to the EPA Region III RCRA Financial Assurance Administrator, Claudia Scott, Scott.Claudia@epa.gov, 215-814-3240, within thirty (30) days after date of execution or finalization as required to make the documents legally binding. The RCRA Financial Assurance Administrator will provide Respondent with a mailing address to send paper copies. Respondent shall also provide copies to the EPA Project Coordinator.

c. If at any time Respondent provides financial assurance for completion of the Work by means of a corporate guarantee or financial test, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods, and will promptly provide any additional information requested by EPA from Respondent or corporate guarantor within seven days of its receipt of such request from EPA or the corporate guarantor.

d. For purposes of the corporate guarantee or the financial test described above, references in 40 C.F.R. § 264.143(f) to “the sum of current closure and post-closure costs and the current plugging and abandonment Estimated Cost of the Works” shall mean “the sum of all environmental remediation obligations, including, but not limited to, obligations under the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9601 et seq., RCRA, the Underground Injection Control Program promulgated pursuant to the Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq., and the Toxic Substances Control Act, 42 U.S.C. §§ 2601, et seq., and any other federal or state environmental obligation guaranteed by such company or for which such company is otherwise financially obligated in addition to the Estimated Cost of the Work.

e. Respondent may combine more than one mechanism to demonstrate financial assurance for the Work to Be Performed under Section VIII of this Order.

f. Respondent may satisfy its obligation to provide financial assurance for the Work to be Performed under Section VIII herein by providing a third party who assumes full responsibility for said Work and otherwise satisfies the obligations of the financial assurance requirements of this Order; however, Respondent shall remain responsible for providing financial assurance in the event such third party fails to do so and any financial assurance from a third party shall be in one of the forms provided in subparagraphs 41.a (1) through (6) above.

g. If at any time EPA determines that a financial assurance mechanism provided pursuant to this Paragraph 41 is inadequate, EPA shall notify Respondent in writing. If at any time Respondent becomes aware of information indicating that any financial assurance mechanism(s) provided pursuant to this Paragraph 41 is inadequate, Respondent shall notify EPA in writing of such information within ten days of Respondent’s becoming aware of such

information. Within 90 days of receipt of notice of EPA's determination, or within 90 days of Respondent's becoming aware of such information, Respondent shall establish and maintain adequate financial assurance for the benefit of the EPA which satisfies all requirements set forth in this Section. Every financial assurance document provided pursuant to this Order shall be submitted to EPA for review in draft form at least 45 days before they are due to be filed and shall be satisfactory in form and substance as determined by EPA.

h. Respondent's inability or failure to establish or maintain financial assurance for completion of the Work to be Performed under Section VIII of this Order shall in no way excuse performance of any other requirements of this Order.

i. Release of Financial Assurance. Respondent may submit a written request to the Director, Land, Chemicals and Redevelopment Division that EPA release Respondent from the requirement to maintain financial assurance under this Section XV upon receipt of written notice from EPA pursuant to Section XXII that, as set forth therein, the terms of this Order have been satisfactorily completed. If said request is granted, the Director, Land, Chemicals and Redevelopment Division shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order.

42. Access to Financial Assurance

a. In the event that EPA determines that Respondent (i) has ceased implementation of any portion of the Work, (ii) is significantly or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both the Respondent and the financial assurance provider of Respondent's failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued and will provide the Respondent with a period of ten days within which to remedy the circumstances giving rise to the issuance of such notice.

b. Failure by the Respondent to remedy its failure to perform to EPA's satisfaction before the expiration of the ten-day notice period specified in Paragraph 42.a, shall trigger EPA's right to have immediate access to and benefit of the financial assurance provided pursuant to Paragraphs 41.a(1) – (6). EPA may at any time thereafter direct the financial assurance provider to immediately (i) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument (ii) or arrange for performance of the Work in accordance with this Order.

c. If EPA has determined that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 42.a have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the Work in accordance with this Order from the financial assurance provider pursuant to this Order, then, upon receiving written notice from EPA, Respondent shall within ten days thereafter deposit into the standby trust fund, or a newly created trust fund approved by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount equal to the estimated cost

of the remaining Work to be performed in accordance with this Order as of such date, as determined by EPA.

d. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel such mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation into the relevant standby trust fund or a newly created trust fund approved by EPA to facilitate performance of the Work in accordance with this Order.

e. Respondent may invoke the procedures set forth in Section XVII (Dispute Resolution) to dispute EPA's determination that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 42.a has occurred. Invoking the dispute resolution provisions shall not excuse, toll, or suspend the obligation of the financial assurance provider under Paragraph 42.b of this Section to fund the trust fund or perform the Work. Furthermore, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion direct the trustee of such trust fund to make payments from the trust fund to any person that has performed the Work in accordance with this Order until the earlier of (i) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice; or (ii) the date that a final decision is rendered in accordance with Section XVII (Dispute Resolution), that Respondent has not failed to perform the Work in accordance with this Order.

43. **Modification of Amount, Form, or Terms of Financial Assurance**

a. **Reduction of Amount of Financial Assurance.** If Respondent believes that the estimated cost to complete the remaining Work has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may, at the same time that Respondent submits the annual cost adjustment, pursuant to Paragraph 40.c, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining Work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining Work to be performed and the basis upon which such cost was calculated. In seeking approval of a revised financial assurance amount, Respondent shall follow the procedures set forth in Paragraph 43.b(2) of this Section. If EPA decides to accept such a proposal, EPA shall notify Respondent of its decision in writing. After receiving EPA's written decision, Respondent may reduce the amount of the financial assurance only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondent may reduce the amount of the financial assurance required hereunder only in accordance with the final EPA Dispute Decision resolving such dispute. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided in Paragraph 43.b below.

b. **Change of Form of Financial Assurance**

(1) If Respondent desires to change the form or terms of financial assurance, Respondent may, at the same time that Respondent submits the annual

cost adjustment, pursuant to Paragraph 40.c of this Section, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided in Paragraph (2) below. The decision whether to approve a proposal submitted under this Paragraph 43 shall be made in EPA's sole and unreviewable discretion and such decision shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Order or in any other forum.

(2) A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated, and the proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify Respondent in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this Paragraph. Within ten days after receiving a written decision approving the proposed revised or alternative financial assurance, Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal and such financial assurance shall be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the EPA Regional Financial Assurance Administrator within 30 days of receiving a written decision approving the proposed revised or alternative financial assurance, with a copy to EPA's Project Coordinator and the State. EPA shall release, cancel, or terminate the prior existing financial assurance instruments only after Respondent has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.

c. **Release of Financial Assurance.** Respondent may submit a written request to the Director, Land, Chemicals and Redevelopment Division that EPA release the Respondent from the requirement to maintain financial assurance under this Section at such time as EPA and Respondent have both executed an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right" pursuant to Paragraph 75 of this Order. The Region III Director of the Land, Chemicals and Redevelopment Division shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order. Respondent shall not release, cancel, or terminate any financial assurance provided pursuant to this Section except as provided in this Paragraph or Paragraph 43.b(2). In the event of a dispute, Respondent may release, cancel, or terminate the financial assurance required hereunder only in accordance with a final administrative or judicial decision resolving such dispute.

XVI. DELAY IN PERFORMANCE/STIPULATED PENALTIES

44. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraph 45 for failure to comply with the requirements of this Order specified below, unless excused under Section XVIII (Force Majeure and Excusable Delay). “Comply” as used in the previous sentence, includes compliance by Respondent with all applicable requirements of this Order, within the deadlines established under this Order. If (i) an initially submitted or resubmitted deliverable contains a material defect and the conditions are met for modifying the deliverable under Section XIV (Agency Approvals/Additional Work/Modifications); or (ii) a resubmitted deliverable contains a material defect; then the material defect constitutes a lack of compliance for purposes of this Paragraph.

45. Stipulated Penalty Amounts

a. For failure to commence, perform or complete Work as prescribed in this Order: \$2,500 per day for one to seven days or part thereof of noncompliance, and \$5,000 per day for each day of noncompliance, or part thereof, thereafter;

b. For failure to comply with the provisions of this Order after receipt of notice of noncompliance by EPA: \$1,000 per day for one to seven days or part thereof of noncompliance, and \$3,000 per day for each day of noncompliance, or part thereof, thereafter; in addition to any stipulated penalties imposed for the underlying noncompliance;

c. For failure to submit deliverables as required by this Order, or for failure to comply with this Order not described in subparagraphs a. and b. immediately above: \$500 per day for one to seven days or part thereof of noncompliance, and \$1,000 per day for each day of noncompliance, or part thereof, thereafter.

46. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 30 days after the agreement or the receipt of EPA’s decision or order. However, stipulated penalties shall not accrue: (i) with respect to a deficient submission under Section XIV (Agency Approvals/Additional Work/Modifications), during the period, if any, beginning on the 31st day after EPA’s receipt of such submission until the date that EPA notifies Respondent of any deficiency, or (ii) with respect to a decision under Section XVII (Dispute Resolution), during the period, if any, beginning the 21st day after the Negotiation Period begins until the date that EPA issues a final decision regarding such dispute. Nothing in this Order shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

47. Following EPA’s determination that Respondent has failed to comply with a requirement of this Order, EPA may give Respondent written notification of such noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in Paragraph 46 regardless of whether EPA has notified Respondent of a violation.

48. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVII (Dispute Resolution) within the 30-day period.

49. If Respondent fails to pay stipulated penalties when due, Respondent shall pay interest on the unpaid stipulated penalties as follows: interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the 31st day after Respondent's receipt of EPA's demand. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, an additional penalty of 6% per annum on any unpaid principal shall be assessed for any stipulated penalty payment which is overdue for 90 or more days. In addition, a handling fee of \$15 per month shall be assessed beginning on the 31st day after Respondent's receipt of EPA's demand.

50. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be paid to "Treasurer, United States" by Automated Clearinghouse ("ACH") to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, MO 63197-9000

Payments shall include a reference to the name of the Facility, Respondent's name and address, email address and telephone number, the EPA docket number of this action, and the amount and method of payment. A copy of the transmittal request shall be sent simultaneously to EPA's Project Coordinator, the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov, and the EPA Regional Hearing Clerk by email at R3_Hearing_Clerk@epa.gov.

51. The payment of penalties and interest, if any, shall not alter in any way Respondent's obligation to complete the performance of Work required under this Order.

52. Nothing in this Order shall be construed as prohibiting, altering or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Order or of the statutes and regulations upon which it is based, including but not limited to 42 U.S.C. § 6928(h)(2); however, EPA shall not seek civil penalties pursuant to 42 U.S.C. § 6928(h)(2) for any violation for which a stipulated penalty is provided in this Order, except in the case of a willful violation of this Order.

53. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Order.

XVII. DISPUTE RESOLUTION

54. The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes regarding this Order. The parties shall attempt to resolve any disagreements concerning this Order expeditiously and informally.

55. **Informal Dispute Resolution.** If Respondent objects to any EPA action taken pursuant to this Order, it shall notify EPA in writing of its objection(s) within 14 days after such action. EPA and Respondent shall have 20 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through informal negotiations (the "Negotiation Period"). Upon request of Respondent, the Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Order.

56. **Formal Dispute Resolution.** If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within 14 days after the end of the Negotiation Period, submit a statement of position to EPA's Project Coordinator. EPA may, within 20 days thereafter, submit a statement of position. Thereafter, an EPA management official at the Division Director level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Order. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

57. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone, or affect in any way any obligation of Respondent under this Order not directly in dispute, unless EPA provides otherwise in writing. Except as provided in Paragraph 46, stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the Order. In the event that Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVI (Delay in Performance/Stipulated Penalties).

XVIII. FORCE MAJEURE

58. "Force majeure," for purposes of this Order, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill such obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work.

59. If any event occurs or has occurred that may delay the performance of any obligation under this Order for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall notify EPA's Project Coordinator orally or, in her or his absence, the Director of the Land, Chemicals and Redevelopment Division, EPA Region III, within seven days of when Respondent first knew that the event might cause a delay. Within seven days thereafter, Respondent shall provide in writing to EPA an explanation of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondent shall include with any notice available documentation supporting its claim that the delay was attributable to a force majeure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 58 and whether Respondent has exercised its best efforts under Paragraph 58, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely notices under this Paragraph.

60. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondent in writing of its decision.

61. If Respondent elects to invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution) regarding EPA's decision, Respondent shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of Paragraph 59. If Respondent carries this burden, the delay at issue shall be deemed not to be a violation by Respondent of the affected obligation(s) of this Order identified to EPA.

62. The failure by EPA to timely complete any obligation under the Order is not a violation of the Order, provided, however, that if such failure prevents Respondent from meeting one or more deadlines, Respondent may seek relief under this Section.

XIX. RESERVATION OF RIGHTS

63. Notwithstanding any other provisions of this Order, EPA retains all of its authority to take, direct, or order any and all actions necessary to protect public health or the

environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste or constituents of such wastes, on, at, or from the Facility, including but not limited to the right to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.

64. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, that may pertain to Respondent's failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2).

65. This Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, claims, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.

66. This Order is not intended to be nor shall it be construed to be a permit. Respondent acknowledges and agrees that EPA's approval of the Work and/or workplan does not constitute a warranty or representation that the Work and/or workplans will achieve the corrective measures completion criteria. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

67. Except as permitted in Section XVII (Dispute Resolution), Respondent agrees not to contest this Order or any action or decision by EPA, including without limitation, decisions of the Regional Administrator, the Director, Land, Chemicals and Redevelopment Division, or any authorized representative of EPA prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order. In any action brought by EPA for violation of this Order, Respondent shall bear the burden of proving that EPA's actions were arbitrary and capricious or not in accordance with law.

XX. OTHER CLAIMS

68. By issuance of this Order, EPA assumes no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. EPA will not be deemed a party to any contract, agreement or other arrangement entered into by Respondent or its officers, directors, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this Order.

69. Respondent waives all claims against the United States relating to or arising out of this Order, including, but not limited to, contribution and counterclaims.

70. Each Party will bear its own litigation costs.

71. In any subsequent administrative or judicial proceeding initiated by EPA for injunctive or other appropriate relief relating to the Facility, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the

claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XXI. INDEMNIFICATION

72. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out actions pursuant to this Order. In addition, Respondent agrees to pay the United States all reasonable costs incurred by the United States, including but not limited to reasonable attorneys' fees and other reasonable expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Order. Neither Respondent nor any such contractor shall be considered an agent of the United States. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Respondent or the United States under statutes or their various contracts. Respondent shall not be responsible for indemnifying or reimbursing the EPA or the United States solely from or on account of negligent or wrongful acts or omissions of an employee or contractor of EPA or the United States in carrying out activities pursuant to this Order. However, the foregoing shall not include any claim based on EPA's oversight or approval of Respondent's deliverables or activities.

73. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

74. Respondent agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Facility, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Facility, including, but not limited to, claims on account of construction delays.

XXII. TERMINATION

75. This Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment of Termination"). EPA will prepare the Acknowledgment of Termination for Respondent's signature. The Acknowledgment of Termination will specify that Respondent has demonstrated to the satisfaction of EPA that the terms of this Order, including

any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. Respondent's execution of the Acknowledgement of Termination will affirm Respondent's continuing obligation to preserve all records as required in Section XII (Record Retention), to maintain any necessary Property Requirements as required in Section 18, to recognize EPA's Reservation of Rights as required in Section XIX, and to comply with Section XX (Other Claims) and Section XXI (Indemnification).

XXIII. INTEGRATION/APPENDICES

76. This Order and its Appendices constitute(s) the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Order. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Order. The following Appendices are incorporated into this Order: Appendix A (Facility Map) and Appendix B (FDRTC).

Agreed this __ day of _____, 2022.

For Excalibur Realty Company:

Digitally Signed and Dated
Trey Fortenberry
Corporate Environmental Specialist
Excalibur Realty Company

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY:

Digitally Signed and Dated
Dana Aunkst
Director
Land, Chemicals and Redevelopment Division
Region III

APPENDIX A

Venator Americas, LLC.
7011 Muirkirk Road
Beltsville, Maryland 20705
EPA ID: MDD062011796

— Entire Facility



APPENDIX B



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

FINAL DECISION AND RESPONSE TO COMMENTS

VENATOR AMERICAS, LLC
7011 MUIRKIRK ROAD

BELTSVILLE, MARYLAND 20705

EPA ID NO. MDD062011796

Prepared by
RCRA Corrective Action Branch #1
Land, Chemicals and Redevelopment Division
November 2021

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List of Acronyms

| | |
|-------|--|
| AR | Administrative Record |
| COC | Contaminant of Concern |
| EPA | Environmental Protection Agency |
| FDRTC | Final Decision Response to Comments |
| GPRA | Government Performance and Results Act |
| MCL | Maximum Contaminant Level |
| MDE | Maryland Department of the Environment |
| MNA | Monitored Natural Attenuation |
| CAO | Corrective Action Objective |
| RCRA | Resource Conservation and Recovery Act |
| RSL | Regional Screening Level |
| SB | Statement of Basis |

Section 1: Introduction

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) selecting a final remedy (Final Remedy) for the Venator Americas, LLC Beltsville Plant located in Beltsville, Maryland (hereinafter referred to as the Facility). EPA's Final Remedy for the Facility consists of the following components: 1) excavation and off-Facility disposal of soil containing concentrations of hexavalent chromium greater than 100 milligrams per kilogram (mg/kg); 2) in situ treatment and monitored natural attenuation (MNA) for groundwater until the federal Maximum Contaminant Level (MCL), promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141, of 100 micrograms per liter ($\mu\text{g/L}$) for total chromium and the EPA Regional Screening Level (RSL) of $0.35 \mu\text{g/L}$ for hexavalent chromium in tapwater have been achieved; 3) compliance with and maintenance of groundwater and land use restrictions to be implemented through institutional controls.

The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq. The Corrective Action program requires that owners or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. Maryland is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the State of Maryland for the Corrective Action Program.

Based on comments received during the public comment period, EPA is making minor modifications to the proposed remedy and incorporating them into the selected Final Remedy as described in more detail in Attachment 2, EPA Response to Comments.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>. The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's Final Remedy is based.

Section 2: Facility Background

2.1 Introduction

The Facility consists of 3.5 acres located at 7011 Muirkirk Road in Beltsville, Maryland. The Facility, formerly operating under the names Laporte Pigments and Mineral Pigments, operated a pigment manufacturing facility, located approximately two miles north of Beltsville, Maryland. Historically, the Facility was owned by a brick manufacturing firm and later as a pigment manufacturing plant, which produced chromium pigments and iron oxide. In 1972, Rockwood Industries obtained the property. Facility activities included the manufacturing of zinc

phosphate, and the milling and blending of iron oxides. The Facility ceased manufacturing in April 2019.

The Facility owner is Excalibur Realty Company (Excalibur Realty), a wholly owned subsidiary of Rockwood Specialties Group, LLC (Rockwood Specialties). Rockwood Specialties is a wholly owned subsidiary of Rockwood Holdings, Inc. (Rockwood Holdings). Rockwood Specialties and Rockwood Holdings were acquired in their entirety by Albemarle Corporation (Albemarle) on January 12, 2015, and Albemarle is now the 100% indirect owner (ultimate parent company) of Excalibur Realty. The Facility is currently vacant and for sale, with the expected future land use to remain industrial/commercial.

3.1 Environmental Investigations

For all environmental investigations conducted at the Facility, groundwater contaminants of concern (COCs) were screened against applicable MCLs, or if a contaminant does not have an MCL, against EPA RSLs for tapwater. Soil concentrations were screened against RSLs for residential soil and industrial soil.

3.1.2. Groundwater Sampling from 2008-2017

Field activities were completed between August 5 and 11, 2008, and included the installation of the borings and collection of groundwater samples. Groundwater samples were collected via eight temporary Geoprobe well points and analyzed for total chromium and hexavalent chromium. The data collected as compared to the MCL for total chromium and the RSL for hexavalent chromium are included in Table 1 below and illustrated in Figure 1.

Table 1: Groundwater Sampling Results for Chromium (August 2008)

| Sample Location | Total Chromium- milligrams per liter (mg/L) (MCL=.1 mg/L) | Hexavalent Chromium (mg/L) (RSL=.000035 mg/L) |
|------------------------|--|--|
| GW-1 | 8.86 | 9.17 |
| GW-2 | 0.103 | <0.010 |
| GW-3 | 0.001 | <0.010 |
| GW-4 | 0.994 | 0.227 |
| GW-5 | 0.002 | <0.200 |
| GW-6 | 1.962 | 2.170 |
| GW-7 | <0.001 | <0.010 |
| GW-8 | <0.001 | <0.200 |

On May 30, 2017, a well gauging and sampling event was conducted at the Facility monitoring well network, which consists of several monitoring points (MPs) that are permanently part of the monitoring network. Groundwater samples were collected from MP-3 and MP-7 for total chromium and hexavalent chromium analysis. MP-3 had 4.77 mg/L of total chromium and 4.16 mg/L of hexavalent chromium. MP-7 had 4.93 mg/L of total chromium and 3.89 mg/L of hexavalent chromium.

3.1.3 Soil Sampling from 2017-2019

Soil and groundwater samples were collected from ten on-site borings between September 30 and October 11, 2019. The soil boring locations were placed near likely source areas based on a review of historical plans, building usage, and tenant interviews.

Soil

Total and hexavalent chromium analyses were performed on soil samples collected at ten locations on the Facility, and the results were compared against EPA industrial RSLs for soil. Soil analytical results are summarized below and shown in Figure 4:

- Zinc: No industrial RSL exceedances in soil were detected.
- Total chromium: No industrial RSL exceedances in soil were detected.
- Hexavalent chromium:
 - Concentrations exceeded the soil industrial RSL of 6.3 milligrams per kilogram (mg/kg) at six locations (SB-02, SB-03, SB-06, SB-07, SB-08, and SB-11).
 - Hexavalent chromium detections exceeded 1,000 mg/kg in two samples: SB-07 and SB-08. These samples were collected below the Building 6 sub-slab floor. Soil concentrations exceeding the industrial RSL were also detected near Building 9 (SB-02 and SB-06).
 - In general, higher soil concentrations were detected within the first 5 feet of ground surface and decreased with depth. Soil detections were greater within the first 5 feet of ground surface and decreased with depth. Historical floor drains and sumps were identified in these buildings and may have served as a conduit for sub-slab impacts and were later investigated in 2019-2020 as discussed in Section 3.1.4.
 - In addition, zinc analysis was performed at select sample locations; no exceedances were observed.

3.1.4 Soil and Groundwater Sampling from 2019-2020

Soil

The 2019-2020 soil sample results were used to assess current concentrations in subsurface soil below paved areas within former manufacturing areas at the Facility. The results indicate that hexavalent chromium is the COC for onsite soil. Hexavalent chromium was detected onsite at concentrations exceeding the industrial RSL within or near Building 6, Building 9, east of Building 9, and north of Building 14. Greater concentrations of hexavalent chromium in soil were detected within the first 5 feet of ground surface and decreased with depth.

The results are summarized as follows:

- Building 6 and Building 9: Greater chromium concentrations in soil were detected in shallow soil below the sub-slab floors within the Building 6 and Building 9. Historical chromium processing activities occurred in these buildings before being phased out in 2007. Historical floor drains and sumps in these buildings may have served as a conduit for sub-slab impacts and are planned for closure.
- Building 14: Building 14 was previously used for warehousing. At SB-11, located directly north of Building 14, shallow hexavalent chromium detections in soil (19 mg/kg at 2.5 feet) exceeded the industrial RSL of 6.3 mg/L, while groundwater concentration of chromium (at MP-18, which was installed at SB-11) was 0.0325 mg/L. This elevated soil detection could be from past residual chromium particulates washed down the storm drain during active operations.

Overall, the distribution of onsite subsurface chromium detections suggests that former manufacturing operations are the likely source of total and hexavalent chromium contamination in groundwater.

Groundwater

- 2019-2020 groundwater sampling results show total and hexavalent chromium are the COCs in onsite and offsite groundwater, as summarized below and depicted in Figure 5. The chromium plume is approximately 115 acres while the plume core is approximately 9.2 acres and extends to the industrial/commercial and agricultural areas downgradient from the Facility.
- The 2019-2020 investigation results suggest that chromium impacts to groundwater likely originated from Building 9, although other sources on the Facility could exist. Historical floor drains and sumps within Building 9 may have served as a conduit for sub-slab groundwater impacts.

- Within the Building 6 area, hexavalent chromium has not been detected in groundwater above 0.001 mg/L.
- Observed detections in soil underlying Building 6 were greater than observed detections in soil underlying Building 9.
- The presence of more abundant silts and clays underlying Building 6 and low hexavalent chromium detections (0.0426 to 0.0523 mg/L) in new downgradient monitoring wells (MP-24 and MP-19) suggest limited soil to groundwater leaching occurs in this area.
- Elevated hexavalent chromium concentrations (7.83 and 8.62 mg/L) were detected in groundwater at new well MP-23 along with elevated concentrations of total chromium (7.1 mg/L). This well was installed in Building 7A along the southern Facility property boundary between wells MP-24 and MP-7.

3.1.5 Potential Offsite Receptors

There are no known groundwater users within the chromium groundwater plume boundary (Figure 5). Historical groundwater use at the Facility and the results of a 2017 offsite potable water user survey in conjunction with Prince George’s Health Department indicated groundwater use for irrigation purposes on an agricultural research farm (University of the District of Columbia’s Firebird Research Farm [FRF]) and at the Department of Agriculture Beltsville Research Center (BARC). Within the chromium groundwater plume (Figure 1), an inactive irrigation supply well is present at FRF directly southeast of the Facility. This well was installed in 2014 and groundwater withdrawal was discontinued in 2016 after the FRF agreed to stop using the irrigation well. Chromium concentrations detected in soil and select plant crops were found to be within background levels.

Downgradient of the chromium groundwater plume, active irrigation water supply wells are present approximately 1.1 miles south of the site at the BARC, as shown on Figure 1. On May 10, 2017, groundwater samples were collected off-site from the BARC shown in Figure 3. Wells 3, 5, and 6 were sampled for total and hexavalent chromium. The data collected are shown below in Table 2. On July 12, 2017, a confirmatory sampling event was conducted of BARC wells 3, 4, and 6 for total and hexavalent chromium. Both total chromium and hexavalent chromium were detected at concentrations less than the MCL of 0.1 mg/L.

Table 2: Groundwater Sampling Results for Chromium in BARC Wells (July 2017)

| Sample Location | Total Chromium - milligrams per liter (mg/L) (MCL=.1 mg/L) | Hexavalent Chromium (mg/L) (RSL=.000035 mg/L) |
|-----------------|--|---|
| BARC Well 3 | <0.03 | <0.00005 |

| | | |
|--------------------|-------|----------|
| BARC Well 5 | <0.03 | <0.00005 |
| BARC Well 6 | <0.03 | <0.00005 |

< Quantitation Level/Reporting Limit

3.2 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 Current Human Exposures Under Control on July 26, 2018 and Migration of Contaminated Groundwater Under Control on May 8, 2018.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives (CAOs) for the specific environmental media at the Facility are the following:

1. Soil

COCs remain in soil at levels creating an unacceptable risk to human health and the environment. Therefore, EPA's CAOs for soil are to: 1) prevent human exposure to COC concentrations above the EPA acceptable risk range of 1×10^{-4} to 1×10^{-6} and a non-cancer hazardous index of 1 for an industrial exposure scenario and 2) reduce soil to groundwater leaching (for total chromium above the MCL of 100 $\mu\text{g/L}$ and hexavalent chromium above the tapwater RSL of 0.35 $\mu\text{g/L}$) adjusted for a risk level of 1×10^{-5} .

2. Groundwater

EPA expects final remedies to return groundwater to its maximum beneficial use within a timeframe that is reasonable given the particular circumstances of the Facility. Therefore, EPA's CAOs for Facility groundwater are 1) to restore the groundwater to the applicable drinking water standard, otherwise known as the MCL, for total chromium and to the applicable tapwater RSL for hexavalent chromium and 2) until these cleanup standards are met, to control exposure to the hazardous constituents remaining in the groundwater.

Section 5: Final Remedy

EPA's Final Remedy for the Facility consists of the following components:

1. Soil

EPA's Final Remedy for soil at the Facility consists of:

- Excavation and off-Facility disposal of highly impacted soil beneath Building 6 and Building 9 areas where hexavalent chromium concentrations are greater than 100 mg/kg.
- Compliance with an EPA-approved Materials Management Plan for any planned subsurface soil disturbance activities (including excavation, drilling and construction) in locations where COCs remain at levels above EPA's screening levels for non-residential use; and
- Compliance with an EPA-approved Corrective Measures Implementation (CMI) Plan requiring the maintenance of impermeable caps existing at the Facility.

2. Groundwater

EPA's Final Remedy for groundwater at the Facility consists of:

- Biological and/or chemical in situ treatment introduced through the subsurface and/or injection wells in areas where hexavalent chromium remains in groundwater in concentrations greater than 1000 ug/L to create reducing conditions favorable for reduction of hexavalent chromium to trivalent chromium and;
- Long-term groundwater monitoring throughout the plume in compliance with an EPA-approved CMI work plan until the MCL of 100 µg/L for total chromium and the tapwater RSL of 0.35 µg/L for hexavalent chromium have been achieved throughout the plume via MNA.

3. Institutional Controls

EPA's Final Remedy includes the following activity and use restrictions:

- Groundwater at the Facility 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 Facility 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;

- All earth-moving activities at the Facility property shall comply with an EPA-approved Materials Management Plan;
- All impermeable barriers over the groundwater impact area at the Facility property shall be maintained and inspected annually in accordance with an EPA-approved CMI plan and Materials Management Plan; and
- The Facility property shall only be used for non-residential purposes such as commercial or industrial uses unless it is demonstrated to EPA that another use will not pose a threat to human health or the environment and EPA provides prior written approval for such use. Non-residential purposes do not include schools, day care centers, nursing homes or other residential-style facilities or recreational areas.
- By December 31st of every fifth year, Albemarle or the then-current Facility property owner shall conduct a well survey and notify EPA, the Prince George's County Health Department, and all affected off-Facility property owners of current groundwater contamination conditions, and whether these conditions should prevent groundwater use, until EPA determines that the MCL of 100 µg/L for total chromium and the tapwater RSL of 0.35 µg/L for hexavalent chromium have been achieved.

The above-listed restrictions shall be implemented through a permit, order, or an environmental covenant. In addition to the activity and use limitations EPA is proposing above, the State of Maryland Well Construction Regulations, codified at Code of Maryland Regulations 26.03.01.05, prohibits installation of individual water systems where adequate community systems are available. The off-Facility FRF property has discontinued use of its agricultural well. The off-Facility BARC property has also implemented groundwater use restrictions prohibiting potable use of groundwater and groundwater well installation for any purpose.

Finally, the Facility owner or operator shall provide EPA with a coordinate survey as well as a metes and bounds survey, of the Facility boundary. Mapping the extent of the land use restrictions will allow for presentation in a publicly accessible mapping program such as Google Earth or Google Maps.

Section 6: Evaluation of Final Remedy

This section provides a description of the criteria EPA used to evaluate the Final Remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies that meet the threshold criteria, EPA then evaluates seven balancing criteria.

| Threshold Criteria | Evaluation |
|--|--|
| <p>1) Protect human health and the environment</p> | <p>EPA’s Final Remedy for the Facility protects human health and the environment by eliminating, reducing, or controlling potential unacceptable risk through the implementation and maintenance of use restrictions, soil excavation of contaminated soil, and groundwater treatment.</p> <p>With respect to soil, the Final Remedy is protective of human health and the environment through excavation of soils containing concentrations of hexavalent chromium greater than 100 mg/kg and implementation of land use restrictions.</p> <p>With respect to groundwater, levels of COCs remain in the groundwater beneath the Facility, the COCs contained in the aquifer are decreasing through natural attenuation as shown by groundwater monitoring data. In addition, in situ treatment will begin to create reducing conditions favorable to chromium attenuation along with groundwater monitoring until the MCL of 100 µg/L for total chromium and the tapwater RSL of 0.35 µg/L for hexavalent chromium have been achieved. The existing State of Maryland well construction regulations will aid in minimizing exposure to contaminated groundwater by prohibiting the installation of individual water systems where adequate community systems are already available.</p> <p>Additionally, the FRF Farm has discontinued groundwater use, and BARC has already implemented restrictions preventing potable use of groundwater and well installation for any purpose. Consequently, the Facility and surrounding area are already being provided with potable water from the City of Beltsville’s public water supply system. With respect to future uses, the Final Remedy requires groundwater use restrictions to minimize the potential for human exposure to contamination and protect the integrity of the remedy. Therefore, EPA’s proposed remedy protects human health and the environment.</p> |
| <p>2) Achieve media cleanup objectives</p> | <p>EPA’s Final Remedy meets the media cleanup objectives based on assumptions regarding current and reasonably anticipated land and groundwater uses. The Final Remedy is based on the current and future anticipated land use at the</p> |

| | |
|---|---|
| | <p>Facility as commercial or industrial.</p> <p>The groundwater plume migration appears to be stabilizing, although total chromium still exceeds its MCL of 100 µg/L and hexavalent chromium still exceeds its tapwater RSL of 0.35 µg/L. In situ treatment will create reducing conditions for chromium attenuation and groundwater monitoring will continue until total chromium's MCL and hexavalent chromium's RSL are met. Therefore, EPA's Final Remedy satisfies this criterion.</p> |
| 3) Remediating the Source of Releases | <p>In all final remedies, EPA seeks to eliminate or reduce further releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment.</p> <p>EPA's Final Remedy requires excavation and off-Facility disposal of highly impacted soil, and in situ treatment of groundwater to address sources of releases.</p> <p>Therefore, EPA has determined that this criterion has been met.</p> |
| 4) Long-term effectiveness | <p>The Final Remedy is long-term effective. Soil will be excavated, and groundwater will be remediated via in situ treatment until CAOs are met. Additionally, EPA's Final Remedy requires compliance with and maintenance of land use and groundwater use restrictions. EPA anticipates that these restrictions will be implemented through an enforceable permit, order, or an environmental covenant. The long-term effectiveness of the proposed remedy for the Facility will be maintained by the implementation of such restrictions.</p> |
| 5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents | <p>The reduction of toxicity, mobility and volume of hazardous constituents will continue through excavation of soil, and in situ remediation of groundwater. Reduction in the volume of total chromium and hexavalent chromium in groundwater has already been achieved, as demonstrated by the data from the groundwater monitoring, and in-situ treatment of groundwater will further create reducing conditions for chromium attenuation. In addition, groundwater monitoring will be required until total chromium's MCL and hexavalent chromium's RSL are achieved.</p> |

| | |
|-------------------------------------|---|
| | |
| 6) Short-term effectiveness | EPA's Final Remedy of excavation and in situ treatment of groundwater poses limited short-term exposure risk to workers and the community. Therefore, EPA's proposed remedy meets this criterion. |
| 7) Implementability | EPA's Final remedy is readily implementable; however, access to install in-situ treatment wells is complicated by widespread existing infrastructure. The groundwater monitoring wells are already in place and operational. EPA plans to implement the remedy through an enforceable mechanism such as an environmental covenant, permit or order. |
| 8) Cost | The cost associated with the remedy, including in-situ treatment and continued groundwater monitoring is estimated at \$5,436,693. |
| 9) Community Acceptance | EPA evaluated community acceptance of the Final Remedy during the public comment period, as described in the Response to Comments. |
| 10) State/Support Agency Acceptance | MDE has reviewed and concurred with the Final Remedy for the Facility. |

Overall, based on the evaluation criteria, EPA has determined the Final Remedy meets the threshold criteria and provides the best balance of tradeoffs with respect to the evaluation criteria.

The Facility owner or operator will be required to demonstrate and maintain financial assurance established and maintained pursuant to the standards contained in 40 C.F.R. Part 264.

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Ms. Caitlin Elverson (3LD10)
Phone: (215) 814-5455
Email: elverson.caitlin@epa.gov

Section 8: Declaration

Based on the Administrative Record compiled for the corrective action at the Facility, I have determined that the Final Remedy selected in this Final Decision is protective of human health and the environment.

Date: November 10, 2021 _____

Dana Aunkst, Director
Land, Chemicals, and Redevelopment Division
US EPA, Region III

Attachments:

Figure 1: Groundwater Sampling Event 2008

Figure 2: Facility Map

Figure 3: Site Location and BARC Wells

Figure 4: Soil Sampling 2019

Figure 5: Site-Wide Hexavalent Chromium Groundwater Plume (Fall 2020)

Attachment 1: EPA Response to Comments

2000, July; A Guide to Developing and Documenting Cost Estimates During the Feasibility Study, EPA 540/R-00/002, USEPA.

2005, March 10; RCRA Site Inspection Report, Rockwood Pigments, Beltsville, MD, USEPA.

2007, February 23; RCRA Site Inspection Report. Rockwood Pigments, Beltsville, MD. February 23, MDE

2016, March 7; Off-site Groundwater Characterization Report, Beltsville Site, 7101 Muirkirk Road, Beltsville, Maryland, TetraTech.

2018, January 29; 2016-2017 Groundwater Sampling Results, Former Rockwood Pigment Plant, Beltsville, Maryland, Arcadis.

2018, May 8; Environmental Indicator Groundwater for Hunstman P-A Americas LLC (Formerly: Rockwood Pigments NA) in Beltsville, Maryland, USEPA.

2018, July 28; Environmental Indicator Human Exposure for Hunstman P-A Americas LLC (Formerly: Rockwood Pigments NA) in Beltsville, Maryland, USEPA.

2019, July; Phase I Environmental Site Assessment. Rockwood Pigments, Beltsville, MD, Arcadis.

2020, March 9; Proposed CMS Corrective Action Objectives, Former Rockwood Pigments Plant, Beltsville, MD, Arcadis.

2020, March 11; Current Conditions Report, Former Rockwood Pigments Plant, Beltsville, Maryland. March 11, Arcadis.

2020, June 2020; Corrective Measure Study Report, Former Rockwood Pigments Plant, Beltsville, Maryland. June 4, Arcadis.

2020, August 11; USEPA Comments on the June 2020 Corrective Measure Study Report. Former Rockwood Pigments Plant, Beltsville, Maryland, USEPA.

2020, September 11; Response to Comments on the June 2020 Corrective Measure Study Report, Former Rockwood Pigments Plant, Beltsville, Maryland, Arcadis.

Figure 1: Groundwater Sampling Event 2008

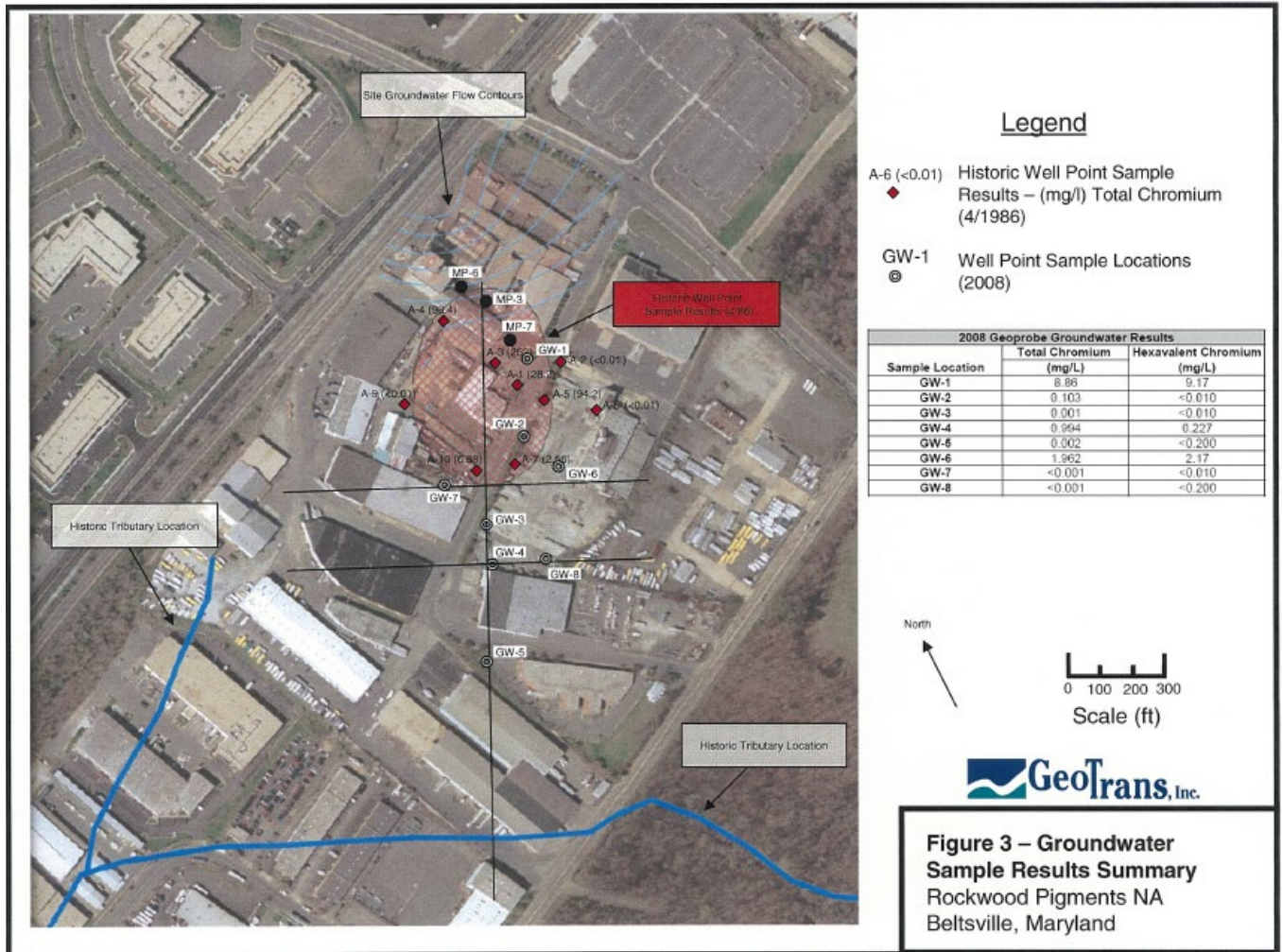


Figure 2: Facility

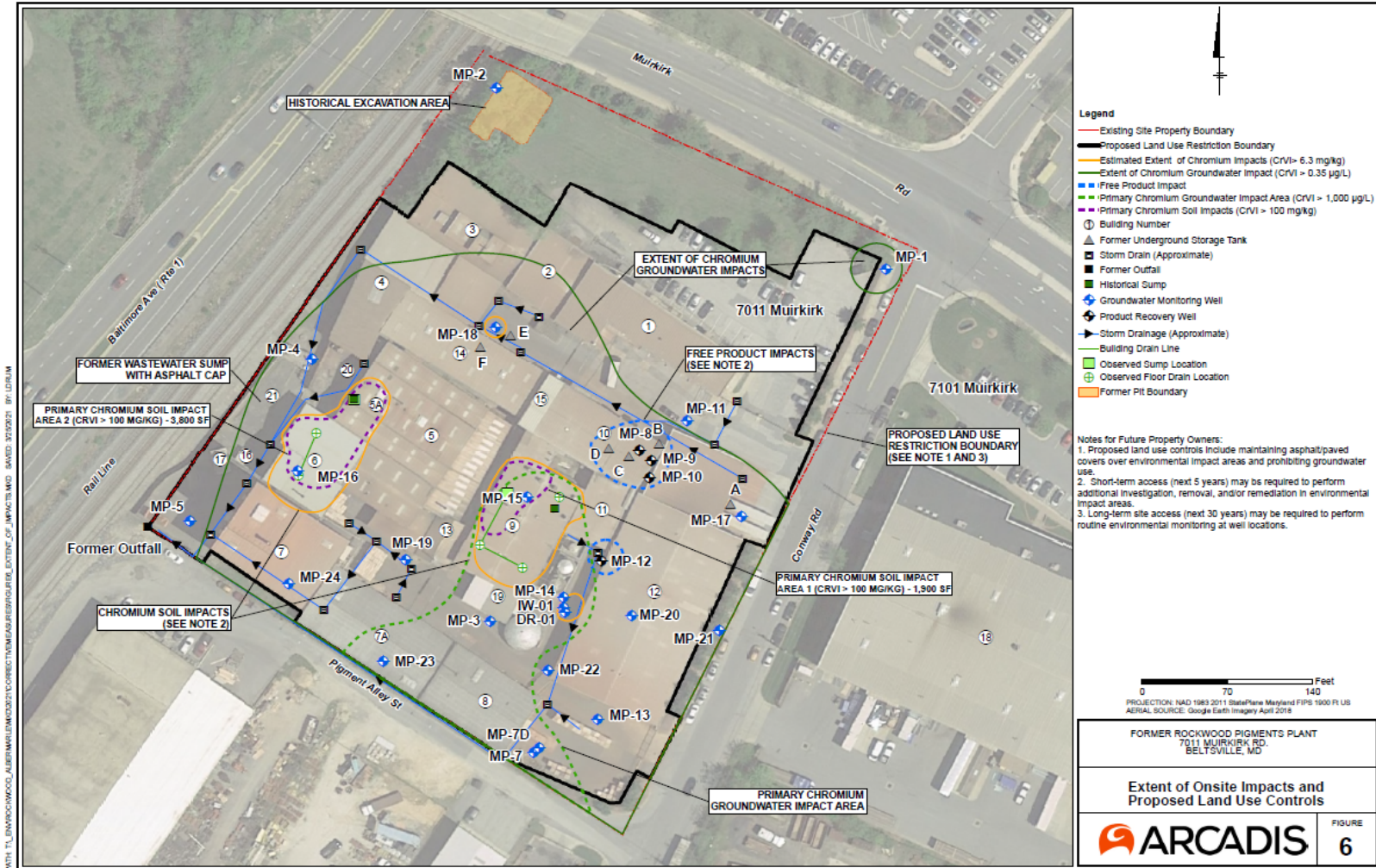


Figure 3: Site Location and BARC Wells

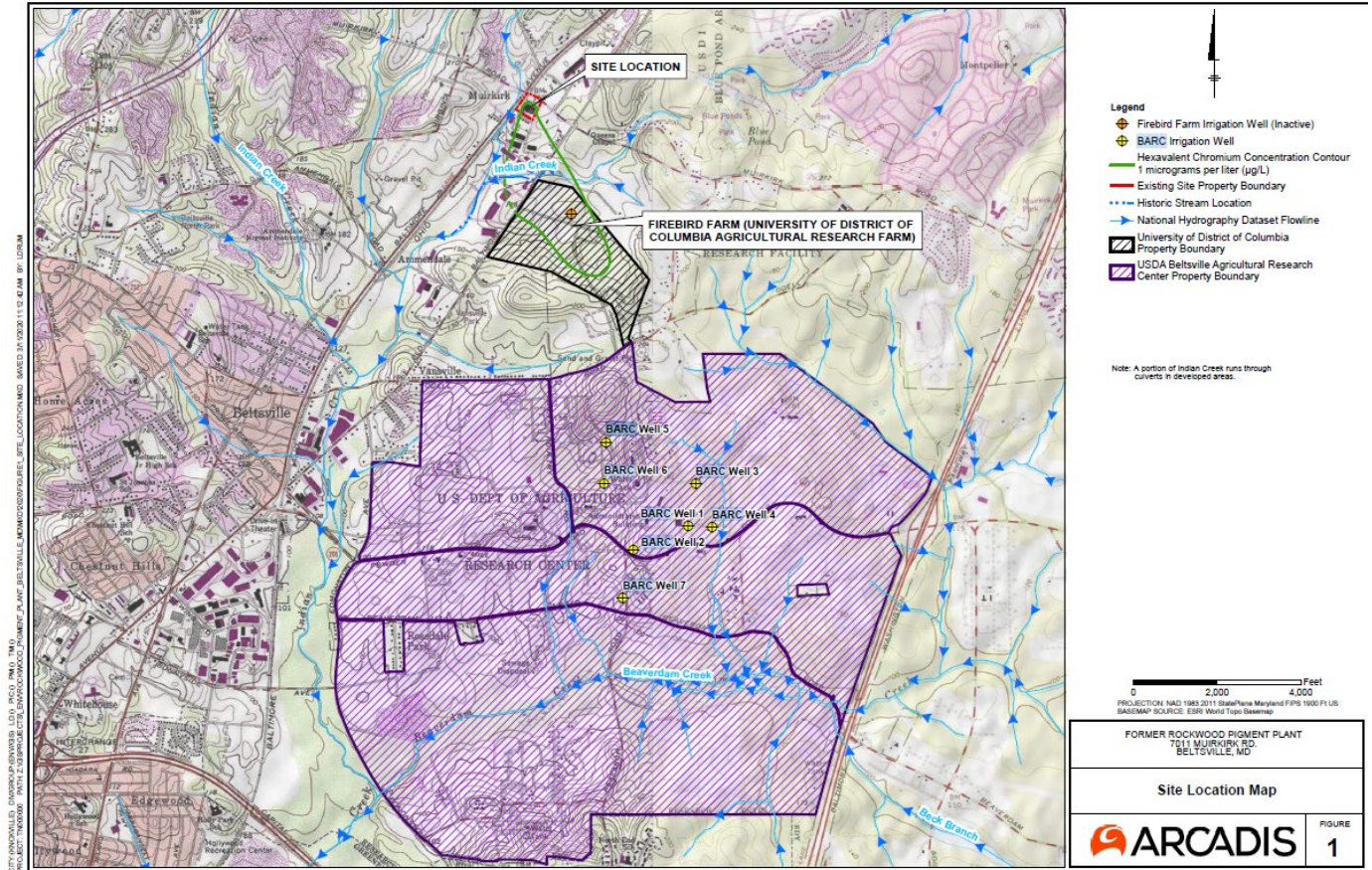
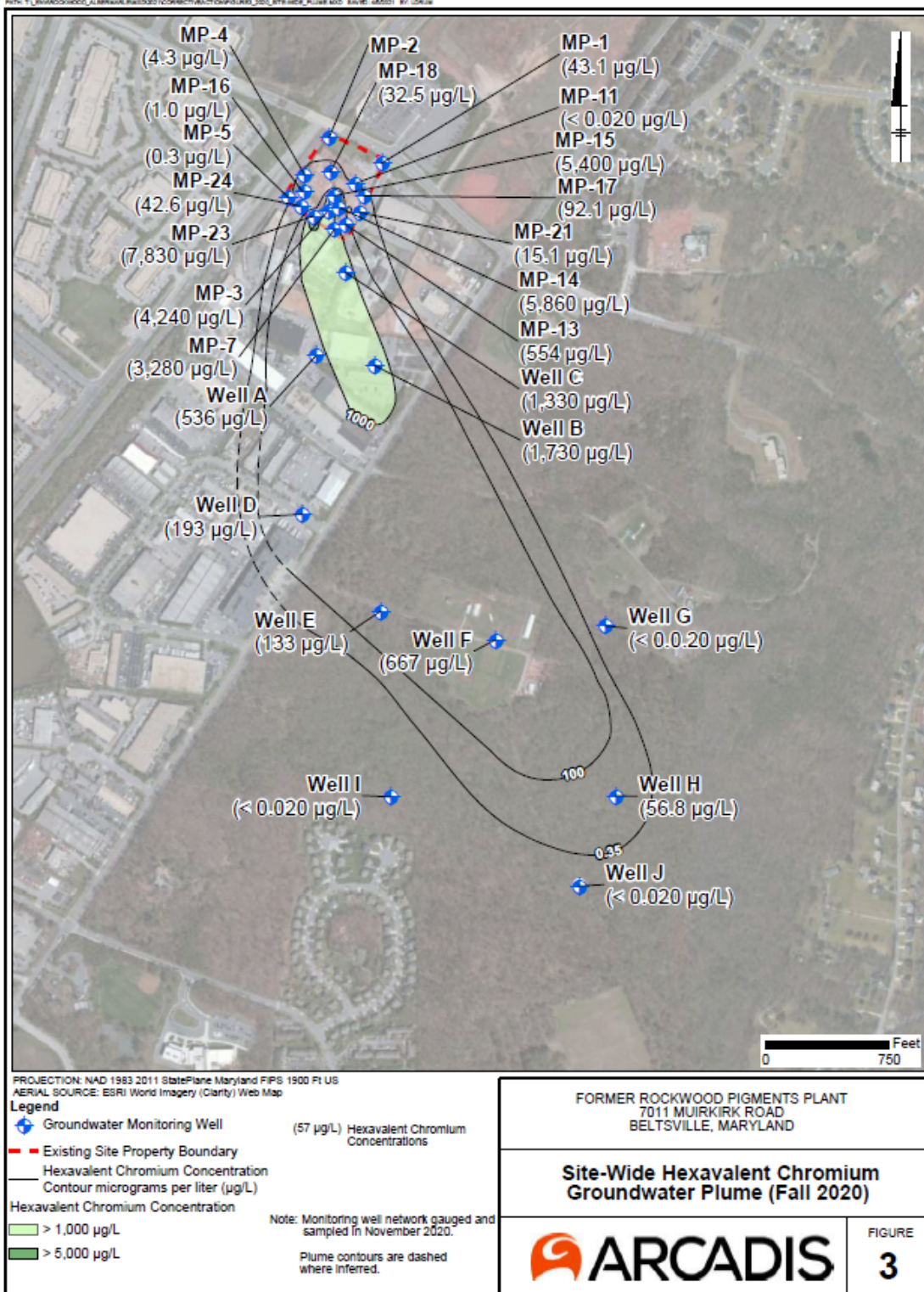


Figure 4: Soil Sampling 2019

| Soil Boring ID | Building Location | Existing Barrier Thickness | Sample Depth (feet bgs) | Sample Date | Laboratory Report Number | Total Chromium (mg/kg) | Hexavalent Chromium (mg/kg) | Zinc (mg/kg) | Field Observations (no staining unless noted) |
|--|-------------------|-------------------------------|-------------------------|-------------|--------------------------|------------------------|-----------------------------|--------------|---|
| USEPA Region 3 Industrial Screening Level | | | | | | 180,000 | 6.3 | 35,000 | |
| MDE Non-Residential Soil Cleanup Standard | | | | | | 180,000 | 6.3 | 35,000 | |
| SB-01 | Building 12 | 12" (concrete) | 4-4.5 | 10/7/2019 | 180-96841-1 | 28 | 0.58 | -- | |
| | | | 10-10.5 | 10/7/2019 | 180-96841-1 | 60 | 3.9 | -- | |
| | | | 24.5-25 | 10/7/2019 | 180-96841-1 | 82 | 6 | -- | |
| SB-02 | Near Building 9 | 10" (concrete) | 1-1.5 | 10/2/2019 | 180-96618-1 | 11,000 | 48 | -- | |
| | | | 4-4.5 | 10/2/2019 | 180-96618-1 | 56 | 30 | -- | |
| | | | 20-20.5 | 10/2/2019 | 180-96618-1 | 13 | 2.2 | -- | |
| SB-03 | Building 9 | 6" (concrete) | 3.5-4 | 10/4/2019 | 180-96779-1 | 110 | 12 | 100 | |
| | | | 5-5.5 | 10/4/2019 | 180-96779-1 | 11 | 26 | 13 | |
| | | | 12.5-13 | 10/4/2019 | 180-96779-1 | 130 | 9.8 | 59 | |
| SB-04 | Near Building 9 | 3" (asphalt) 6" (concrete) | 1-1.5 | 10/2/2019 | 180-96618-1 | 33 | 1.6 | -- | |
| | | | 3-3.5 | 10/2/2019 | 180-96618-1 | 14 | 1.3 | -- | |
| | | | 15-15.5 | 10/2/2019 | 180-96618-1 | 40 | 6.2 | -- | |
| SB-06 | Building 9 | 8" (concrete) | 3-3.5 | 10/1/2019 | 180-96552-1 | 2,400 | 100 | 2,100 | Green soil |
| | | | 4-4.5 | 10/7/2019 | 180-96841-1 | 410 | 34 | 60 | Green soil |
| | | | 17-17.5 | 10/7/2019 | 180-96841-1 | 120 | 8.6 | 13 | |
| SB-07 | Building 6 | 16" (concrete) | 4-4.5 | 10/1/2019 | 180-96552-1 | 220 | 1,700 | 52 | Slight green sand |
| | | | 10-10.5 | 10/10/2019 | 180-97154-1 | 110 | 4.2 | 31 | |
| | | | 24.5-25 | 10/10/2019 | 180-97154-1 | 23 | 1.7 | 4 | |
| | | | 24.5-25 | 10/10/2019 | 180-97154-1 | 9.4 | 0.91 | 2 | |
| SB-08 | Building 6 | 10" (concrete) | 1-1.5 | 10/2/2019 | 180-96618-1 | 8,700 | 1,400 | 2,800 | Heavy green staining |
| | | | 4-4.5 | 10/2/2019 | 180-96618-1 | 1,400 | 380 | 220 | Green soil |
| | | | 8-8.5 | 10/2/2019 | 180-96618-1 | 230 | 15 | 52 | |
| SB-09 | Near Building 12 | 4" (asphalt) 8" (concrete) | 4-4.5 | 10/8/2019 | 180-96981-1 | 12 | 0.92 | 6.7 | |
| | | | 10-10.5 | 10/9/2019 | 180-97056-1 | 0.021 | 0.49 | -- | |
| | | | 18-18.5 | 10/4/2019 | 180-96779-1 | 2.9 | 0.62 | -- | |
| | | | 24.5-25 | 10/9/2019 | 180-97056-1 | 6.6 | 0.88 | -- | |
| SB-10 | Building 12 | 12" (concrete) | 2-2.5 | 10/4/2019 | 180-96779-1 | 27 | 0.98 | -- | |
| | | | 5-5.5 | 10/4/2019 | 180-96779-1 | 22 | 0.4 J | -- | |
| | | | 22-22.5 | 10/4/2019 | 180-96779-1 | 7.5 | 0.82 | -- | |
| SB-11 | Near Building 14 | 4" (asphalt) 8" (concrete) | 2.5-3 | 10/3/2019 | 180-96681-1 | 640 | 19 | -- | |
| | | | 2.5-3 | 10/3/2019 | 180-96681-1 | 150 | 120 | -- | |
| | | | 4-4.5 | 10/3/2019 | 180-96681-1 | 200 | 2.7 | -- | |
| | | | 9-9.5 | 10/3/2019 | 180-96681-1 | 41 | 0.52 | -- | |

Figure 5: Site-Wide Hexavalent Chromium Groundwater Plume (Fall 2020)



Attachment 1: EPA Response to Comments

On July 28th, 2021, EPA issued a Statement of Basis (SB) in which it announced its proposed remedy for the Facility. Consistent with the public participation requirements under RCRA, EPA requested comments from the public on the proposed remedy. The commencement of a thirty (30)-day public comment period was announced in *The Prince George's Post* and on the EPA Region III website.

EPA received one set of comments on the SB. Mr. Matthew McCaughey from Arcadis on behalf of Albemarle Corporation (Albemarle) submitted the following comments on the Statement of Basis via letter to Ms. Caitlin Elverson, EPA, dated September 21, 2021. EPA has carefully reviewed the comments and found that they merited minor modifications to the proposed remedy as described in the SB, as detailed below. Albemarle's comments are listed below, and EPA's responses to these comments follow:

1. "Change to 'Former Rockwood Pigments, Inc. Plant' to be consistent other documents."

EPA agrees that this is the name used in many Facility documents but notes the Facility name should reflect the name in EPA's RCRAInfo system: "Venator Americas, LLC." EPA has updated the Facility name in the Final Decision accordingly.

2. "The chromium VI action level is site specific. Add a clarifying statement so the reader understands. Add '...adjusted for a risk level of 1×10^{-5} .'"

EPA agrees with the comment but has incorporated this language into Section 4 of the Final Decision, where the corrective action objectives are identified, not the introduction as the commenter suggested.

3. "Albemarle's legal department reviewed the ownership language and made some minor edits. Including 'The Facility owner is Excalibur Realty Company (Excalibur Realty), a wholly owned subsidiary of Rockwood Specialties Group, LLC. Rockwood Specialties Group, LLC (Rockwood Specialties) is a wholly owned subsidiary of Rockwood Holdings, Inc. (Rockwood Holdings). Rockwood Specialties and Rockwood Holdings were acquired in their entirety by Albemarle Corporation (Albemarle) on January 12, 2015, and Albemarle is now the 100% indirect owner (ultimate parent company) of Excalibur Realty. The Facility is currently vacant and for sale, with the expected future land use to remain industrial/commercial.'"

EPA agrees with this comment and has modified the ownership information in the Final Decision to reflect the comment.

4. Rockwood commented on several grammatical mistakes.

EPA agrees and has corrected the grammatical errors in the Final Decision.

5. “Consider moving the zinc result to the bottom since this chemical is not a COC. In addition, zinc analysis was performed at select sample locations; no exceedances were observed”

EPA agrees with the addition of the zinc analyses bullet point and has added this information to Section 3.1.3 of the Final Decision.

6. “This table shows a CrVI result several magnitudes above the adjusted RSL at BARC Well 3. Arcadis does not recall this. After checking the lab reports, the result shown in this table has a unit transcription error. The correct values are posted in yellow. This may have been an error in an interim table we prepared that was later fixed, but then resurfaced during preparation of this SB.”

EPA agrees with the comment and has edited Table 2 in the Final Decision to reflect the correct data from July 2017.

7. Rockwood suggested an addition of “adjusted for a risk level of 1×10^{-5} .”

EPA agrees with this comment and has added this information to Section 4, Corrective Action Objectives, of the Final Decision.

8. Rockwood suggested changing “Soil Management Plan” to “Materials Management Plan”

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

9. Rockwood suggested changing “injection wells” to “the subsurface in”.

EPA agrees with this comment and has modified the language to “the subsurface and/or injection wells” into Section 5, Final Remedy, of the Final Decision.

10. “This section needs to identify the responsible party. References to the property owner could create confusion after the property is sold.”

EPA agrees with the comment on the wording of this use restriction, which will run with the land if recorded in an environmental covenant. EPA has modified the language in Section 5, Final Remedy to state “Albemarle or the then-current property owner” as EPA can require corrective action of current or past owners of an interim status facilities subject to Section 3008(h) of RCRA.

11. Rockwood suggested changing “annual well survey” to “a site inspection”.

EPA partially agrees with the comment. EPA has modified the Final Decision to require an annual cap inspection in accordance with an EPA-approved CMI plan and Materials Management Plan. The well survey of off-Facility properties impacted by Facility groundwater contamination is a separate requirement in the Final Decision. As explained in EPA’s response to comment 14, below, the Final Decision requires the survey to be conducted every five years.

12. “Maryland Department of Environment requires an annual inspection of the surface cap.”

As stated above, EPA has modified the Final Decision to require an annual cap inspection.

13. “This statement could be interpreted to imply that EPA plans to establish covenants for all property owners within the plume footprint. Albemarle plans to establish a covenant for the facility only. (This covenant is under EPA review). If the agency intends to request covenants for offsite parcels, we would like to discuss further.”

The Final Decision requires implementation of institutional controls for the Facility property only. The Final Decision does not require implementation of institutional controls for off-Facility properties but requires a groundwater survey of off-Facility properties impacted by Facility groundwater contamination every five years.

14. “Neither Albemarle nor Arcadis are aware of any other Region III RCRA or CERCLA sites with this requirement. We do not object to the proposed action, but as previously discussed, we ask the agency to consider whether providing annual notifications for an indefinite period is really needed. Please consider changing the proposed frequency from annual to every five years for notifications.”

EPA has updated Section 5.3 of the Final Decision to require the well survey and notification every five years.