

**SIXTH FIVE-YEAR REVIEW REPORT FOR
AIRCO SUPERFUND SITE
MARSHALL COUNTY, KENTUCKY**



AUGUST 2024

Prepared by

**U.S. Environmental Protection Agency
Region 4
Atlanta, Georgia**

Randall Chaffins Digitally signed by Randall Chaffins
Date: 2024.08.06 14:31:39 -04'00'

**Caroline Y. Freeman, Director
Superfund & Emergency Management Division**

Table of Contents

LIST OF ABBREVIATIONS AND ACRONYMS	iii
I. INTRODUCTION	1
Site Background	1
FIVE-YEAR REVIEW SUMMARY FORM	2
II. RESPONSE ACTION SUMMARY	4
Basis for Taking Action	4
Response Actions	4
Status of Implementation	5
Systems Operations/Operation and Maintenance (O&M).....	10
III. PROGRESS SINCE THE PREVIOUS REVIEW	11
IV. FIVE-YEAR REVIEW PROCESS	12
Community Notification, Community Involvement and Site Interviews.....	12
Data Review	12
Site Inspection.....	14
V. TECHNICAL ASSESSMENT.....	14
QUESTION A: Is the remedy functioning as intended by the decision documents?	14
QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?	15
QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?.....	16
VI. ISSUES/RECOMMENDATIONS.....	16
OTHER FINDINGS.....	16
VII. PROTECTIVENESS STATEMENT	16
VIII. NEXT REVIEW	16
APPENDIX A – REFERENCE LIST	A-1
APPENDIX B – CURRENT SITE STATUS.....	B-1
APPENDIX C – SITE CHRONOLOGY	C-1
APPENDIX D – PRESS NOTICE.....	D-1
APPENDIX E – INTERVIEW FORMS	E-1
APPENDIX F – SITE INSPECTION CHECKLIST	F-1
APPENDIX G – SITE INSPECTION PHOTOS.....	G-1
APPENDIX H – DEED RESTRICTIONS.....	H-1
APPENDIX I – ENVIRONMENTAL COVENANT	I-1

Tables

Table 1: Site COCs, by Media	4
Table 2: 1988 ROD RAOs and Site Remedy Components as Revised by the 2020 ESD.....	5
Table 3: Summary of Planned and/or Implemented Institutional Controls (ICs).....	8
Table 4: Protectiveness Determinations/Statements from the 2019 FYR	11
Table 5: Status of Recommendations from the 2019 FYR.....	11
Table C-1: Site Chronology.....	C-1

Figures

Figure 1: Site Vicinity Map	3
Figure 2: Institutional Control Map	9
Figure 3: Detailed Site Map.....	13

LIST OF ABBREVIATIONS AND ACRONYMS

ACL	Alternate Concentration Limit
ARAR	Applicable or Relevant and Appropriate Requirement
AWQC	Ambient Water Quality Criteria
BFG	B.F. Goodrich
BOC	British Oxygen Company
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Contaminant of Concern
CWM	Chlorinated Wax-like Material
EDC	Ethylene Dichloride or 1,2-Dichloroethane
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FS	Feasibility Study
FYR	Five-Year Review
HHRA	Human Health Risk Assessment
HQ	Hazard Quotient
IC	Institutional Control
KDEP	Kentucky Department of Environmental Protection
KDNREP	Kentucky Department for Natural Resources and Environmental Protection
KPDES	Kentucky Pollutant Discharge Elimination System
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MNA	Monitored Natural Attenuation
µg/L	Micrograms per Liter
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NAPL	Non-Aqueous Phase Liquid
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PAH	Polycyclic Aromatic Hydrocarbon
PCAP	Plant-Wide Corrective Action Program
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
PRP	Potentially Responsible Party
PVC	Polyvinyl Chloride
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
RSL	Regional Screening Level

SAR	Site Assessment Report
SVOC	Semi-Volatile Organic Compound
TCA	Trichloroethane
TCE	Trichloroethylene
UU/UE	Unlimited Use/Unrestricted Exposure
VOC	Volatile Organic Compound

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii)) and considering EPA policy.

This is the sixth FYR for the Airco Superfund site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE). The Site consists of one operable unit (OU), which addresses remedies for soil, groundwater, surface water and sediment.

EPA remedial project manager (RPM) Connor Keisling led the FYR. Participants included EPA hydrogeologist Ben Bentkowski, EPA community involvement coordinator (CIC) Donnica Wiley, Kentucky Department of Environmental Protection (KDEP) project manager Sheri Uhlenbruch, and Ryan Burdge and Claire Marcussen from EPA support contractor Skeo. The potentially responsible parties (PRPs) were notified of the initiation of the FYR. The review began on 8/21/2023. Documents used to prepare this FYR are summarized in Appendix A. Appendix B includes site status information and Appendix C provides a brief site chronology.

Site Background

The 2.75-acre Site is in a heavy industrialized area along Kentucky Highway 1523 and the south side of the Tennessee River, about a mile northeast of Calvert City, Kentucky (Figure I). The Site is an inactive landfill currently owned and managed by Linde LLC. Deciduous trees and the Tennessee River border the Site to the north, and a slough and deciduous forest border it to the east. Westlake Monomers and agricultural cropland are located south of the Site. The B.F. Goodrich (BFG) Superfund site borders the Site to the west. From 1956 to 1971, Air Reduction Company Inc. (Airco) owned and operated the Airco landfill. Wastes reportedly included ashes from coal-operated boilers, off-grade polyvinyl chloride solids, ferric hydroxide sludges and some non-combustible construction wastes. Landfill disposal activities contaminated soil, groundwater, surface water, and sediment.

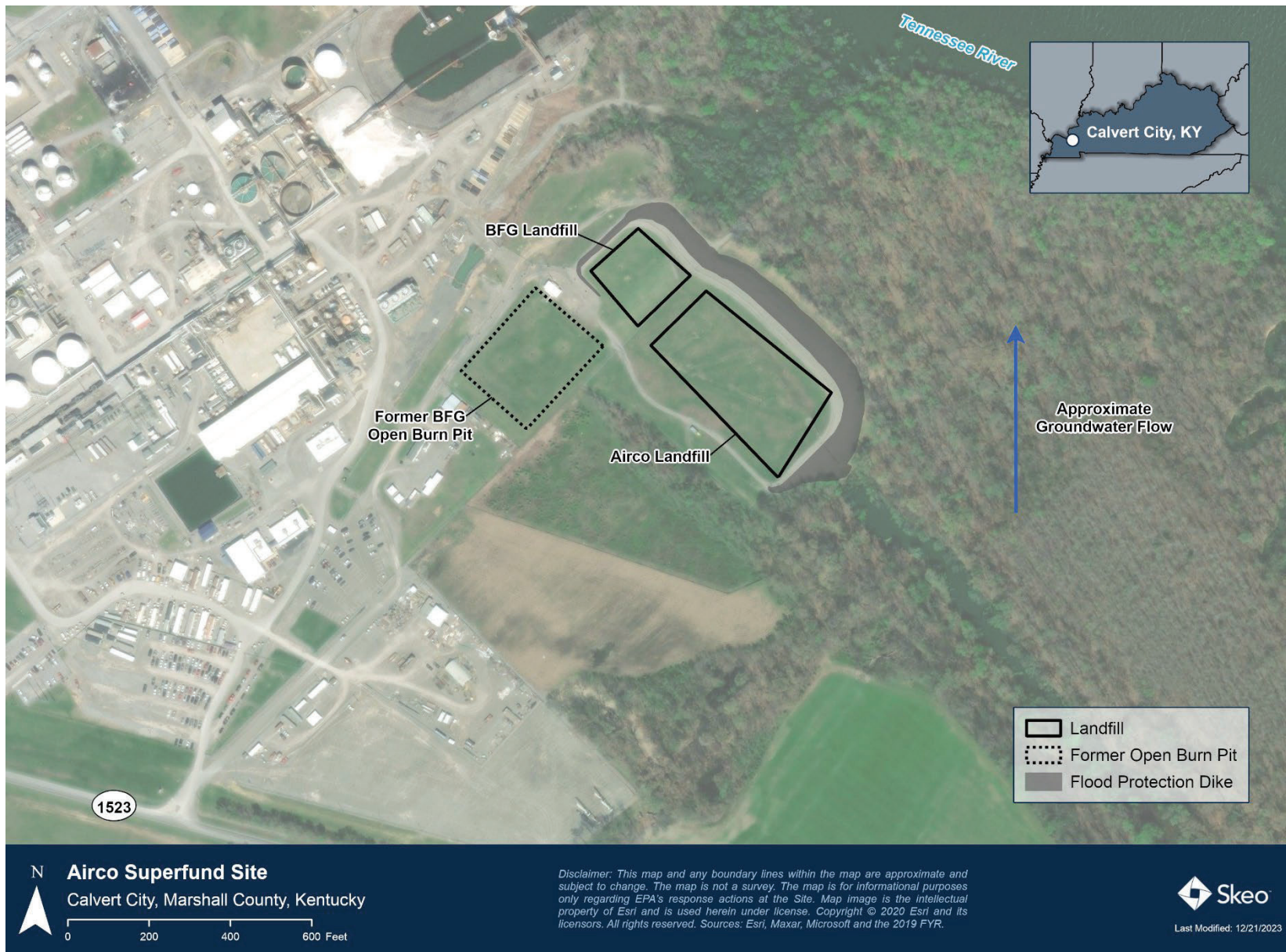
Currently the Site consists of the landfill and flood protection dike due to its location in a floodplain of the Tennessee River. It is characterized by gently sloping topography. Chemical manufacturing currently occurs in areas located on the terrace, which is a broad, flat plain about 25 feet above the floodplain. Site groundwater occurs in two zones, the shallow and deep zones, which are separated by a discontinuous semi-confining layer. Groundwater in both zones flows from the south to the north, discharging into the Tennessee River; flows can reverse direction during flooding or near pumping wells. KDEP considers all groundwater in Kentucky to be a potential drinking water resource. Groundwater is used locally for domestic and industrial purposes. Calvert City drinking water supply

wells are located about 3 miles southeast and upgradient of both the Site and industrial complexes in Calvert City.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Airco		
EPA ID: KYD041981010		
Region: 4	State: Kentucky	City/County: Calvert City/Marshall
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	Has the Site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: EPA		
Author name: Connor Keisling		
Author affiliation: EPA with support provided by Skeo		
Review period: 8/21/2023 – 7/31/2024		
Date of site inspection: 11/15/2023		
Type of review: Statutory		
Review number: 6		
Triggering action date: 9/12/2019		
Due date <i>(five years after triggering action date)</i> : 9/12/2024		

Figure 1: Site Vicinity Map



II. RESPONSE ACTION SUMMARY

Basis for Taking Action

The Site’s potentially responsible parties (PRPs) completed a remedial investigation (RI) in 1988 that characterized contamination at the Airco landfill and the BFG landfill and burn pit. The RI confirmed the presence of various volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and inorganic contaminants in groundwater, soil, and sediment samples. The most prevalent VOC was 1,2-dichloroethane (also known as ethylene dichloride). Other contaminants included various polycyclic aromatic hydrocarbon (PAH) compounds, polychlorinated biphenyls (PCBs), and metals. Data from the RI and conclusions from the human health risk assessment indicated unacceptable risks associated with potential exposure to contaminated soils, ditch sediment, and groundwater. In addition, the risk assessment indicated that contaminants had migrated from the landfill, posing a long-term threat to the Tennessee River. Table 1 provides a summary of the contaminated media and associated contaminants of concern (COCs).

Table 1: Site COCs, by Media

COC	Soil and Ditch Sediment	Groundwater	Surface Water
EDC	X ^a	X	X
Carbon tetrachloride	-	X	X
Chloroform	-	X	X
1,1,2-Trichloroethane	-	X	X
Benzene	-	X	X
PAHs	X	X	X
Tetrachloroethylene (PCE)	-	X	X
1,1,2,2-Tetrachloroethane	-	X	X
Trichloroethylene (TCE)	-	X	X
Chlorobenzene	-	X	X
1,1-Dichloroethane	-	X	X
Vinyl chloride	-	X	X
Bis(2-chloroethyl) ether	-	X	X
PCBs	X	-	-
Mercury	X	-	-
<i>Notes:</i>			
a. Applies to subsurface soil only.			
Source: 1988 Record of Decision (ROD)			
- = not a COC			

Response Actions

Between 1956 and 1968, before the Kentucky Department for Natural Resources and Environmental Protection (KDNREP, now KDEP) instituted a solid waste management program, Airco operated a landfill without regulatory oversight. In October 1968, Airco applied for and was granted a state solid waste disposal operation permit. When the Air Products Company leased the area in 1971, KDNREP issued a renewal permit for the company to operate the Airco landfill. The landfill was primarily used for disposal of ferric oxide, a residual product of wastewater treatment. In 1978, KDNREP instructed Airco to construct a dike at its northern boundary to protect the landfill from a 100-year flood event. The KDNREP landfill operating permit was cancelled in 1980 when the Air Products Company discontinued use of the area. The company submitted a closure plan to the state to cap the landfill.

KDNREP approved the plan in October 1980 and the landfill was capped, graded, and revegetated in September 1981. The EPA proposed the Site for listing on the Superfund program’s National Priorities List (NPL) in December 1982. The EPA finalized the Site’s listing on the NPL in September 1984.

The EPA selected the Site’s long-term cleanup plan in the Site’s 1988 Record of Decision (ROD), which also included remedy components for the BFG landfill and former burn pit. Table 2 summarizes the remedial action objectives (RAOs) and the selected final remedy for the Site. The 1988 ROD also established cleanup goals for COCs in surface soil outside the BFG former burn pit area that required excavation and consolidation within the BFG former burn pit area along with sediment from the drainage ditch to the north. However, this remedy was later determined to be associated with the BFG site and not the Site in a 2020 Explanation of Significant Differences (ESD).

The 1988 ROD also established alternate cleanup levels (ACLs) as cleanup goals for groundwater that are protective of surface water and estimated that groundwater cleanup goals would be met within 10 years of the initiation of the Site’s groundwater extraction and treatment system. According to the Site’s 2020 ESD, the pump and treat groundwater remedy component applied to the BFG site and not the Site. The 1988 RODs for the two sites were similar because of what was believed to be comingled contamination and overlapping disposal areas. Subsequent remedial investigation of the Site’s area by the EPA concluded that there is a separation in contamination, particularly regarding the source of groundwater contamination. As a result of the 2020 ESD, cleanup goals for soil and groundwater were no longer necessary for the Site.

Table 2: 1988 ROD RAOs and Site Remedy Components as Revised by the 2020 ESD

Environmental Medium	1988 RAO	Remedy Components
Groundwater	<ul style="list-style-type: none"> • Contain the on-site contaminated groundwater plume. 	<ul style="list-style-type: none"> • Groundwater monitoring. • Deed restrictions to prevent installation of drinking water supply wells.
Soil and sediment	<ul style="list-style-type: none"> • Eliminate leachate production in the burn pit area. • Bring the Airco and BFG landfills into compliance with Kentucky statutes regarding structures on a 100-year floodplain. • Protect the public health and environment from exposure to on-site contaminated soils and sediments. 	<ul style="list-style-type: none"> • Construction of a flood protection dike around the east and north side of the Airco landfill. • Installation of a leachate extraction system. • Upgrading of the existing Airco landfill clay cap. • Deed restrictions preventing residential development on Airco-owned property.

Status of Implementation

As recognized in the previous two FYR reports, and addressed in the 2020 ESD, some remedy components in the Site’s 1988 ROD only apply to the BFG landfill and burn pit. Therefore, this summary of remedy implementation for the Site does not discuss the following remedy requirements because they do not apply to the Site:

- Pumping contaminated groundwater and treating it by air stripping.
- Excavating surface soils and ditch sediments and placing them in the BFG burn pit.

- Installing an organic vapor recovery system in the BFG burn pit.
- Covering the BFG burn pit with a cap.
- Establishing ACLs for 13 COCs for the BFG burn pit.
- Establishing timeframes for achieving groundwater cleanup goals based on contaminants at the burn pit.

The PRPs (BFG and the BOC Group) began the remedial design in January 1989. In June 1992, the EPA and the PRPs finalized a Consent Decree for the PRPs to complete the remedial design and remedial action. The PRPs completed the remedial design in September 1995, which triggered the start of the remedial action. Between June 1996 and July 1997, the PRPs upgraded the existing landfill cap and installed a leachate extraction system consisting of four leachate sumps (LS-3, -4, -5 and -6) that pump the leachate to a treatment system at the Westlake facility.¹ The PRPs backfilled and compacted excavated areas within the limits of the Site's landfill with approved low-permeability soil material. In addition, the PRPs constructed the flood protection dike, seeded, and mulched the area, and installed a 6-foot chain-link fence topped with barbed wire around the landfill and flood protection dike.

In May 1999, the PRPs observed a chlorinated wax-like material (CWM) on the surface of the landfill. A toxicity characteristic leaching procedure analysis classified the material as a non-hazardous waste. The stained landfill-cover soils were excavated, containerized, and incinerated at an approved facility. New clay material was integrated into the landfill clay cover to provide a continuous barrier. After clay replacement, an approximately 18-inch topsoil layer was placed over the landfill and seeded in October 1999.

The PRPs have since observed CWM on the Airco landfill surface in the southeastern part of the property, including in 1999 and 2009. Analysis of the material in 2009 indicated that it was contaminated with multiple chlorinated VOCs. Although the CWM contains many of the same contaminants associated with the BFG site, the material is not believed to be of the same origin due to a difference in physical properties. It may be associated with the polyvinyl chloride solids formerly disposed of at the Airco landfill. At cooler temperatures, the CWM remains in solid form and is expected to become viscous as temperature increases. The CWM may migrate upwards to the landfill surface due to lithostatic pressure within the landfill; the surfacing of the material does not appear to be related to ambient temperatures or seasonal flooding of the Tennessee River. The CWM was identified as a hazardous waste, as defined by the toxicity characteristic leaching procedure criteria for vinyl chloride. The CWM was removed to a permitted disposal facility and the landfill cap was repaired in 2009. With each discovery of CWM, a limited excavation of the material was conducted.

In 2014, CWM was observed on the landfill and an effort was made to dig into the landfill and remove as much of the CWM as possible.² About 112 tons of contaminated soil were excavated and removed for off-site disposal as a Resource Conservation and Recovery Act (RCRA) hazardous waste. The excavation was backfilled and covered with a 30-millimeter liner. In April 2019, a similar event occurred and was addressed the same way. The EPA requested that the PRPs conduct a focused risk assessment. The EPA approved the *November 2020 Revised Focused Risk Assessment* in February 2021,

¹ Landfill cap upgrades included stripping about 4 inches of the existing vegetative cover and adding a composite geosynthetic clay liner and riverside soil blanket system.

² The 2024 Airco O&M Plan (rev.2) lists CWM surfacings in 1999, 2009, and 2014.

which concluded that the CWM does not pose unacceptable health risks to occasional maintenance workers and site trespassers.

The 2021 Operations and Maintenance Plan (O&M Plan) includes contingency operations that are outside normal site operation and maintenance (O&M) for identification and remediation of CWM. If future surfacing of CWM is observed, the material will be addressed and remediated using the procedures detailed in the 2024 O&M Plan, including notification procedures for informing regulatory agencies as well as procedures for excavating, screening of material for determining off-site disposal requirements, installing a flexible liner (if the surface area is more than 100 square feet), and installing final covers such as a low permeability cap and vegetative layer.

In March 2021, the EPA issued the Site's Final Close-Out Report documenting that all necessary response actions for the Site have been completed. In September 2021, the EPA and KDEP determined that all appropriate response actions under CERCLA (other than O&M, monitoring and FYRs) had been completed and the EPA deleted the Site from the NPL. The EPA approved the discontinuation of groundwater monitoring at the Airco landfill in 2021. Activities are limited to maintenance of the landfill cap and flood protection dike. In 2024, EPA approved the updated Airco O&M Plan.

Institutional Control (IC) Review

The Marshall County Clerk certified a notice of deed restriction for the Site on January 28, 2000. It is summarized in Table 3. A copy of the deed restriction is included in Appendix H. As required by the 1992 Consent Decree, the deed restriction restricts site activities that could disturb the integrity of the final cover, the integrity of the containment or treatment system, or the function of any monitoring system on the Site. Although the deed restriction does not explicitly prohibit residential use or the installation of drinking water supply wells, the current implemented deed restriction precludes construction of any building on the Site or well installation since such activities would disturb the remedy. Thus, the EPA concluded in the 2020 ESD that the current institutional controls in place meet the intent of the ROD requirement of prohibiting residential use and the installation of drinking water supply wells (Table 3).

Currently, access to the Site is controlled and monitored daily. In addition, engineering controls including fencing and signage prevent exposure to waste materials by limiting access to the Site by authorized personnel only. To meet state requirements, the EPA worked with the property owner and KDEP to memorialize the institutional controls in a state-administered environmental covenant program. The environmental covenant was finalized in June 2023 (Table 3, Appendix I). Figure 2 shows the area covered by the 2000 deed restriction and 2023 environmental covenant.

Table 3: Summary of Planned and/or Implemented Institutional Controls (ICs)

Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Airco Landfill Property	Yes	Yes	41000001000C000	Prevent residential exposure and prevent installation of drinking water supply wells.	Notice of Deed Restrictions, January 2000
				Protect the integrity of remedial components	Environmental Covenant June 2023

Figure 2: Institutional Control Map



Systems Operations/Operation and Maintenance (O&M)

The 2024 O&M Plan for the Site provides a description of normal O&M activities to be completed. The Site is a closed landfill with security fencing. Normal site activities include monitoring and maintenance for the following remedial elements:

- Security fencing inspection and repair.
- Erosion and drainage structure inspection and repair.
- Mowing of the landfill cap.
- Stormwater management system maintenance.
- Groundwater monitoring well and leachate sump maintenance.

The monitoring of these remedial elements is conducted twice per year (i.e., semi-annually) during April and October, except for mowing, which is completed every 4 to 6 weeks during the growing season. These monitoring frequencies are the minimum frequency; increased monitoring may be conducted as needed.

The EPA approved the discontinuation of groundwater monitoring in 2021. However, the PRPs still use the monitoring wells and leachate sumps at the Site for periodic water elevation measurements. The leachate sumps have not been used for active pumping since 2016³, no longer contain pumps and have been disconnected from electrical power. The monitoring wells and leachate sumps are included in the semi-annual inspections for evidence of damage to the casing, cap or locking system. Groundwater monitoring will still be conducted for much of the same area by the BFG PRPs in order to support the groundwater remedy for the BFG site.

An annual maintenance summary submitted to the EPA and KDEP documents the findings of the semi-annual inspections, corrective actions, and any outstanding issues.

During the FYR site inspection, the O&M contractor indicated that there have been no major site maintenance activities required since the previous FYR beyond the usual site maintenance well and pump repairs.

³ In 2016, the EPA granted approval for the PRP to terminate pumping at the four leachate sumps (LS-3, -4, -5 and -6) because leachate concentrations were not significantly above federal drinking water standards.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the previous FYR (Table 4) as well as the recommendations from the previous FYR (Table 5) and the status of those recommendations.

Table 4: Protectiveness Determinations/Statements from the 2019 FYR

OU #	Protectiveness Determination	Protectiveness Statement
Site-wide	Short-term Protective	<p>The remedy is protective of human health and the environment in the short term because the landfill is capped and fenced to prevent human and ecological exposure to waste, a dike was constructed to provide flood protection, and institutional controls are in place to prevent disturbing the remedy. To ensure the remedy's protectiveness over the long term, the following activities are warranted:</p> <ul style="list-style-type: none"> • Clarification of the 1988 ROD components that apply to the Airco landfill.

Table 5: Status of Recommendations from the 2019 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
1	Several remedy components and COCs do not apply to the Site	Evaluate revisions to the site remedy to clarify which of the 1988 ROD components apply to the Airco landfill.	Completed	The EPA issued an ESD that clarified the site remedy components by removing the requirement to address groundwater contamination and to attain ACLs in the groundwater in the limited area and updated the institutional controls.	5/21/2020

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

The EPA issued an online news release on October 19, 2023 to announce that the FYR was underway. A copy of the news release is available online at: <https://www.epa.gov/newsreleases/epa-review-cleanups-40-southeast-superfund-sites> and is included in Appendix D. The results of the review and the completed FYR Report will be made available on the EPA's site profile page: www.epa.gov/superfund/airco, which can also be accessed online from the Site's information repository, Marshall County Public Library, located at 949 5th Ave SE in Calvert City, Kentucky.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that had been implemented to date. The completed interview forms are included in Appendix E. During the site inspection, the EPA met with Chris Anthony with GHD, Inc. (O&M contractor for the PRPs) at the site office to discuss the Site (see Site Inspection section of this report).

Data Review

Because there are no groundwater remediation goals for the Site, groundwater monitoring for the Airco landfill is no longer conducted as outlined in the 2020 ESD. However, groundwater monitoring will still be conducted in much of the same area by BFG's PRPs for the purpose of supporting the groundwater remedy for the BFG site. Figure 3 displays site features.

Figure 3: Detailed Site Map



Site Inspection

The site inspection took place on 11/15/2023. Participants included the EPA RPM Connor Keisling, Derek Payne with Batelle, Katie Leniski with Davenergy, and Ryan Burdge and Claire Marcussen with Skeo (EPA FYR support contractor). The purpose of the inspection was to assess the protectiveness of the remedy. A copy of the inspection checklist and site inspection photographs are included in Appendix F and Appendix G, respectively.

Participants met at the Site entrance at 2468 Industrial Parkway in Calvert City, Kentucky. Site inspection participants began the inspection at the southeast corner of the landfill and walked the landfill perimeter along a gravel road. Participants observed that the chain-link perimeter fence topped with barbed wire was in good condition with warning signs at regular intervals. Site inspection participants observed that the grass cover was well established; no animal burrows or erosion was observed. Monitoring wells were clearly labelled, in good condition and locked. Site inspection participants also observed that the flood protection dike and riprap area of the dike were in good condition. No erosion was observed on the dike, and it effectively keeps local flooding from entering the landfill. The stormwater sampling location was observed southeast of the landfill; it was free of any obstructions. The gravel road surrounding the landfill was in good condition with no settlement or erosion observed. Participants concluded the inspection by meeting with Chris Anthony with GHD, Inc. (O&M contractor for the PRPs) at the site office. Mr. Anthony reported that there has been no trespassing or vandalism at the Site due to the chain-link fence, a locked gate, and daily inspections conducted by GHD, Inc. He reported that there have not been any O&M issues beyond the routine maintenance activities such as inspecting and maintaining the site cover and pumps within the wells sampled on behalf of the adjacent BGF Superfund site.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Question A Summary:

The remedy is functioning as intended by the 1988 ROD and 2020 ESD based on the implementation of remedy components that apply to the Airco landfill.⁴ The EPA documented the applicable remedy components implemented at the Site in the 2020 ESD, clarified that there are no groundwater COCs for the Airco Landfill site, and determined that the broader use restrictions stated in the 1992 Consent Decree replace the previous institutional controls called for in the 1988 ROD. Groundwater quality monitoring and leachate collection is no longer required due to low concentrations of VOCs and metals relative to drinking water standards.

Because CWM was found in 2014 and in 2019 at the same landfill area as in 2009, the PRPs excavated soil affected by CWM and installed a flexible 30-millimeter liner over the excavated areas. The PRPs

⁴ Several remedy components identified in the ROD apply only to the BFG landfill and burn pit. These components include: 1) pumping and treating contaminated groundwater; 2) excavating surface soils and placing them in the BFG burn pit; 3) installing an organic vapor recovery system at the BFG burn pit; 4) covering the BFG burn pit with a cap; 5) establishing ACLs for COCs for the BFG burn pit; and 6) establishing timeframes for achieving groundwater cleanup goals based on contaminants at the burn pit.

then restored the low-permeability cap and vegetative layers of the cap. The previous FYR determined that vinyl chloride has been at or below the MCL in the Airco landfill leachate, demonstrating that leaching is not occurring from any residual CWM that may remain. Overall, the remedial components implemented at the Site are functioning properly, and the remedy is functioning as intended. The Airco landfill has been capped and fenced to prevent exposure to landfill wastes. A dike has been constructed to protect the landfill from flooding. The 2020 ESD determined that there are no groundwater COCs and therefore no groundwater remediation goals to attain. As a result, groundwater monitoring is no longer conducted at the Site. Organic-related groundwater contaminants underlying the Site are being addressed pursuant to the 2018 BFG ROD.

A 2000 notice of deed restriction and a 2023 Environmental Covenant restrict activities that would disturb the remedial system installed at the Site. The 1988 ROD required that the institutional controls prevent residential development of the property or installation of residential wells at the Site; such activities are precluded by the current implemented deed restriction, which restricts Site activities that could disturb the integrity of the final cover, the integrity of the containment or treatment system, or the function of any monitoring system on the Site. In addition, access to the Site is controlled. Further, engineering controls including fencing and signage prevent exposure to waste materials by limiting access to the Site to authorized personnel only.

Site inspection observations and review of O&M documentation indicate that the landfill cap is in good condition.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Question B Summary:

The exposure assumptions and toxicity data remain valid for the Site as there is no current or future exposure due to the Site's landfill being contained by engineering and institutional controls. The EPA has determined that the groundwater remedial goals (i.e., ACLs) established in the 1988 Airco ROD are not applicable to site contaminants but are intended to address contaminants associated with the BFG site.

The groundwater RAO to contain the on-site contaminated groundwater plume by extraction and treatment as established in the 1988 Airco ROD applies only to the BFG site. The soil RAOs in the 1988 Airco ROD that apply to the Airco landfill were established to bring the landfills into compliance with state statutes regarding structures on a 100-year floodplain and to protect public health and the environment from exposure to on-site contaminated soils. These soil RAOs have been met by the excavation of areas within the limits of the Site's landfill, upgrading the existing landfill cover and installing a flood protection dike.

The vapor intrusion exposure pathway is incomplete at the Airco landfill because there are no occupied structures at the Site and a deed restriction is in place that restricts site activities that could disturb the integrity of the final cover, including any future construction of buildings. In addition, the presence of VOCs in the subsurface are attributed to the adjacent BFG site and will be further addressed as part of that concurrent FYR report.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No information has come to light that could call into question the protectiveness of the remedy.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
OU1

OTHER FINDINGS

There were no additional recommendations identified during the FYR. These recommendations do not affect current and/or future protectiveness.

VII. PROTECTIVENESS STATEMENT

Site-wide Protectiveness Statement	
<i>Operable Unit:</i> OU-1	<i>Protectiveness Determination:</i> Protective
<i>Protectiveness Statement:</i> The remedy is protective of human health and the environment because the landfill is capped and fenced to prevent human and ecological exposure to waste, a dike was constructed to provide flood protection, and institutional controls are in place to prevent disturbing the remedy.	

VIII. NEXT REVIEW

The next FYR Report for the Airco Superfund site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

CERCLA Information System Site Information, accessed from <https://www.epa.gov/superfund/airco>. Accessed October 2018.

Draft Supplemental Assessment Report, Airco Landfill, Calvert City, Kentucky. Prepared by Greenstar. January 2011.

Draft Phase II Supplemental Assessment Report, Airco Landfill, Calvert City, Kentucky. Prepared by Greenstar. August 2013.

Explanation of Significant Differences. Airco Superfund Site, Calvert City, Kentucky. May 2020.

Final Close-out Report. Airco Superfund Site, Calvert City, Kentucky. Prepared by EPA. March 2021.

Five-Year Review. B.F. Goodrich Landfill/Airco Superfund Site, Calvert City, Kentucky. Prepared by U.S. Army Corps of Engineers, Louisville District. September 2006.

Five-Year Review, Airco Superfund Site, Calvert City, Kentucky. EPA Region 4. September 2011.

Five-Year Review, Airco Superfund Site, Calvert City, Kentucky. EPA Region 4. May 2017.

Five-Year Review, Airco Superfund Site, Calvert City, Kentucky. EPA Region 4. September 2019.

Focused Risk Assessment. Airco Landfill, Calvert City, Kentucky. Prepared by Tetra Tech, Inc. for Greenstar Environmental Solutions, LLC. November 2020.

Operation and Maintenance Plan, Airco Superfund Site, Calvert City, Kentucky. Greenstar Environmental Solutions, LLC. January 2021.

Record of Decision, Airco Site, Marshall County, Kentucky, EPA Region 4. June 24, 1988.

APPENDIX B – CURRENT SITE STATUS

Environmental Indicators

- Current human exposures at the Site are under control.
- Current groundwater migration is under control.

Are Necessary Institutional Controls in Place?

All Some None

The 1988 Airco ROD specified that a notice would be placed on the property deed restricting the use of the property for residential use or installation of private wells for potable use. However, the 1992 Consent Decree included a broader number of land use/activity restrictions, which prohibits the disturbance of the landfill cover, or the integrity of the containment, treatment system, or monitoring system. The EPA has determined in the 2020 ESD that the broader use restrictions stated in the 1992 Consent Decree should replace the previous institutional controls called for in the 1988 Airco ROD. These broader use restrictions were included in a 2023 environmental covenant that has been recorded in the Marshall County Registry of Deeds and was determined by the EPA to satisfy the requirement of institutional control implementation for the Site.

Has EPA Designated the Site as Sitewide Ready for Anticipated Use?

Yes No

Has the Site Been Put into Reuse?

Yes No

APPENDIX C – SITE CHRONOLOGY

Table C-1: Site Chronology

Event	Date
KDEP discovered contamination during a site investigation	May 1980
PRPs closed the landfill with a clay cap and cover under KDNREP-approved closure plan	September 1981
The EPA proposed the Site for listing on the NPL	December 30, 1982
The EPA finalized the Site’s listing on the NPL	September 21, 1984
PRPs began the RI/feasibility study (FS) for the Site	September 28, 1984
PRPs entered into an Administrative Order on Consent with the EPA to conduct the RI/FS for the Airco landfill and the BFG landfill and burn pit	November 27, 1985
PRPs completed the RI/FS and the EPA signed the ROD for the final remedy for the Site	June 24, 1988
PRPs began the remedial design for the Site	January 5, 1989
PRPs entered into a Consent Decree with the EPA for the Site’s remedial design and remedial action	June 29, 1992
PRPs completed the remedial design and began the remedial action for the Site	September 29, 1995
PRPs completed remedy construction for the Site	September 29, 1997
Chlorinated Wax-like Material (CWM) surfaced at the Airco Landfill	1999
PRPs filed deed restrictions for the Site with the Marshall County Clerk’s Office	January 28, 2000
The EPA signed the first FYR Report for the Site	July 16, 2001
The EPA signed the second FYR Report for the Site	September 19, 2006
PRPs investigated the lateral extent of wax-like substance at the Site	July 2009
CWM surfaced at the Airco Landfill	2009
PRPs completed a phase 1 site assessment to evaluate remedy requirements specific to the Airco landfill	January 2011
The EPA signed the third FYR Report for the Site	September 19, 2011
PRPs initiated a stormwater sampling program	February 2012
PRPs completed a phase 2 supplemental assessment to evaluate groundwater contamination and whether MNA is a viable remedial option for the Airco landfill	August 2013
CWM surfaced at the Airco Landfill	2014
PRPs completed the excavation of wax-like material from the Site	March 2015
The EPA approved termination of pumping from the four leachate sump wells	June 2, 2016
The EPA signed the fourth FYR Report for the Site	May 11, 2017
PRPs completed the excavation of wax-like material from the Site	April 2019
The EPA signed the fifth FYR Report for the Site	September 12, 2019
The EPA issued the ESD that clarified the site remedy components by removing the requirement to address groundwater contamination and to attain ACLs in the groundwater in the limited area and updates the institutional controls.	May 21, 2020
The EPA demonstrated that the Site achieved Sitewide Ready for Anticipated Reuse status	June 15, 2020
PRPs completed a focused risk assessment to demonstrate that potential site worker exposure or trespasser exposure to CWM does not pose unacceptable risks	November 30, 2020
The EPA issued the Final Close-out Report	March 11, 2021
The EPA deleted the Site from the NPL	September 14, 2021
Environmental covenant recorded for Airco property	June 28, 2023

APPENDIX D – PRESS NOTICE



U.S. ENVIRONMENTAL PROTECTION AGENCY

NEWS RELEASE

EPA.GOV/NEWSROOM

EPA to Review Cleanups at 40 Southeast Superfund Sites

Contact Information: region4press@epa.gov, 404-562-8400

ATLANTA (Oct. 19, 2023) – Today, the U.S. Environmental Protection Agency (EPA) announced that comprehensive reviews will be conducted of completed cleanup work at 40 Superfund sites in the Southeast.

The sites, located in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee, will undergo a legally required Five-Year Review to ensure that previous remediation efforts at the sites continue to protect public health and the environment.

"Five-Year Reviews are an integral part of the site remediation process because they help make sure remedies are still protective," said **Acting EPA Region 4 Administrator Jeaneanne Gettle**. "The Southeast Region will benefit tremendously from the full restoration of Superfund sites, which can become valuable parts of the community landscape."

The Superfund Sites where EPA will conduct Five-Year Reviews in Calendar Year 2024 are listed below. The web links provide detailed information on site status as well as past assessment and cleanup activity. Once the Five-Year Review is complete, its findings will be posted in a final report at <https://www.epa.gov/superfund/search-superfund-five-year-reviews>.

Alabama

American Brass Property <https://www.epa.gov/superfund/american-brass>

Florida

Arkla Terra Property <https://www.epa.gov/superfund/arkla-terra>

Brown's Dump <https://www.epa.gov/superfund/brown's-dump>

City Industries, Inc. <https://www.epa.gov/superfund/city-industries-inc>

Coleman-Evans Wood Preserving Co. <https://www.epa.gov/superfund/coleman-evans-wood>

Harris Corp. (Palm Bay Plant) <https://www.epa.gov/superfund/harris-corporation-palm>

Jacksonville Ash Site <https://www.epa.gov/superfund/jacksonville-ash>

Kassauf-Kimerling Battery Disposal <https://www.epa.gov/superfund/kassauf-kimerling-th>

Nocatee Hull Creosote <https://www.epa.gov/superfund/nocatee-creosote>

Pioneer Sand Co. <https://www.epa.gov/superfund/pioneer-sand-company>

Piper Aircraft Corp./Vero Beach Water & Sewer Dept. <https://www.epa.gov/superfund/piper-aircraft-corp>

Sanford Gasification Plant <https://www.epa.gov/superfund/sanford-gasification>

Sixty-Second Street Dump <https://www.epa.gov/superfund/sixty-second-street>

Solitron Microwave <https://www.epa.gov/superfund/solitron-microwave>

Tyndall Air Force Base <https://www.epa.gov/superfund/tyndall-air-force-base>

United Metals, Inc. <https://www.epa.gov/superfund/united-metals-inc>

Whitehouse Oil Pits <https://www.epa.gov/superfund/whitehouse-oil-pits>

Georgia

Woolfolk Chemical Works, Inc. <https://www.epa.gov/superfund/woolfolk-chemical-works>

Kentucky

Airco <https://www.epa.gov/superfund/airco>

B. F. Goodrich <https://www.epa.gov/superfund/bf-goodrich>

Paducah Gaseous Diffusion Plant (USDOE) <https://www.epa.gov/superfund/paducah-gaseous-diffusion-plant>

Mississippi

Sonford Products <https://www.epa.gov/superfund/sonford-products>

North Carolina

General Electric Co/Shephard Farm <https://www.epa.gov/superfund/general-electric-shepherd-farm>

North Belmont PCE <https://www.epa.gov/superfund/north-belmont-pce>

South Carolina

Calhoun Park Area <https://www.epa.gov/superfund/search-superfund-five-year-reviews>

Gieger (C & M Oil) <https://www.epa.gov/superfund/geiger>

Helena Chemical Co. Landfill <https://www.epa.gov/superfund/helena-chemical-landfill>

Lyman Dyeing and Finishing <https://www.epa.gov/superfund/lyman-dyeing-finishing>

Medley Farm Drum Dump <https://www.epa.gov/superfund/medley-farm-drum-dump>

Savannah River Site (USDOE) <https://www.epa.gov/superfund/savannah-river-site>

WamChem, Inc. <https://www.epa.gov/superfund/wamchem>

Tennessee

American Creosote Works, Inc. (Jackson Plant) <https://www.epa.gov/superfund/american-creosote-works-jackson>

Oak Ridge Reservation (USDOE) <https://www.epa.gov/superfund/oak-ridge-reservation>

Ross Metals Inc. <https://www.epa.gov/superfund/ross-metals>

Background

Throughout the process of designing and constructing a cleanup at a hazardous waste site, EPA's primary goal is to make sure the remedy will be protective of public health and the environment. At many sites, where the remedy has been constructed, EPA continues to ensure it remains protective by requiring reviews of cleanups every five years. It is important for EPA to regularly check on these sites to ensure the remedy is working properly. These reviews identify issues (if any) that may affect the protectiveness of the completed remedy and, if necessary, recommend action(s) necessary to address them.

There are many phases of the Superfund cleanup process including considering future use and redevelopment at sites and conducting post cleanup monitoring of sites. EPA must ensure the remedy is protective of public health and the environment and any redevelopment will uphold the protectiveness of the remedy into the future.

The Superfund program, a federal program established by Congress in 1980, investigates and cleans up the most complex, uncontrolled, or abandoned hazardous waste sites in the country and endeavors to facilitate activities to return them to productive use. In total, there are more than 280 Superfund sites across the Southeast.

More information:

EPA's Superfund program: <https://www.epa.gov/superfund>

###

EPA.GOV



APPENDIX E – INTERVIEW FORMS

AIRCO SUPERFUND SITE FIVE-YEAR REVIEW INTERVIEW FORM	
Site Name: AIRCO	
EPA ID: KYD041981010	
Interviewer name: Connor Keisling	Interviewer affiliation: USEPA Region 4
Subject name: Sheri Uhlenbruch	Subject affiliation: KDEP
Subject contact information: sheri.uhlenbruch@ky.gov	
Interview date: May 22, 2024	Interview time: N/A
Interview location: N/A	
Interview format (circle one): In Person Phone Mail Email Other:	
Interview category: State Agency	

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

The Airco property appears to be well maintained, monitored and assessed/addressed when disturbance to the cap is noted.

2. What is your assessment of the current performance of the remedy in place at the Site?

The current remedy appears to be in order and functioning as designed. The current remedy is relying on the inclusion within the footprint another NPL site (BF Goodrich) to maintain groundwater controls in addition to the engineered cap.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?

No.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.

Yes. There has been periodic reporting as to the efficacy of the engineered cap, and reporting of disturbances/remedial activities to address those disturbances.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Site's remedy?

No.

6. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

Yes.

7. Are you aware of any changes in projected land use(s) at the Site?

No.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

Not at this time.

9. Do you consent to have your name included along with your responses to this questionnaire in the FYR report?

Yes.

1.	O&M Documents	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	<input checked="" type="checkbox"/> O&M manual	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	<input checked="" type="checkbox"/> As-built drawings	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	<input checked="" type="checkbox"/> Maintenance logs	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: _____			
2.	Site-Specific Health and Safety Plan	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Contingency plan/emergency response plan	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: _____			
3.	O&M and OSHA Training Records	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: _____			
4.	Permits and Service Agreements	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Air discharge permit	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Effluent discharge	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Waste disposal, POTW	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Other permits: _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
5.	Gas Generation Records	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: _____			
6.	Settlement Monument Records	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: _____			
7.	Groundwater Monitoring Records	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: <u>Groundwater is no longer occurring as per the 2020 ESD demonstrates that there are no site groundwater COCs.</u>			
8.	Leachate Extraction Records	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: <u>Annual leachate continued until 2016 when it was agreed it no longer was warranted.</u>			
9.	Discharge Compliance Records	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Air	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	<input type="checkbox"/> Water (effluent)	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
	Remarks: <u>Annual sampling of the stormwater sampling is no longer required as per the 2020 ESD.</u>			
10.	Daily Access/Security Logs	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: _____			
IV. O&M COSTS				
1.	O&M Organization	<input type="checkbox"/> Contractor for state	<input checked="" type="checkbox"/> Contractor for PRP	<input type="checkbox"/> Contractor for Federal facility
	<input type="checkbox"/> State in-house	<input type="checkbox"/> Contractor for state	<input checked="" type="checkbox"/> Contractor for PRP	<input type="checkbox"/> Contractor for Federal facility
	<input type="checkbox"/> PRP in-house	<input type="checkbox"/> Contractor for state	<input checked="" type="checkbox"/> Contractor for PRP	<input type="checkbox"/> Contractor for Federal facility
	<input type="checkbox"/> Federal facility in-house	<input type="checkbox"/> Contractor for state	<input checked="" type="checkbox"/> Contractor for PRP	<input type="checkbox"/> Contractor for Federal facility
2.	O&M Cost Records	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> Unavailable
	<input checked="" type="checkbox"/> Funding mechanism/agreement in place	<input type="checkbox"/> Unavailable		
	Original O&M cost estimate: <u>Not applicable; estimated O&M costs were not separated from the BFG Superfund Site</u> <input type="checkbox"/> Breakdown attached			
	Total annual cost by year for review period if available			
	From: <u>1/1/2016</u>	To: <u>12/1/2016</u>	<u>\$44,432</u>	<input type="checkbox"/> Breakdown attached
	Date	Date	Total cost	
	From: <u>1/1/2017</u>	To: <u>12/1/2017</u>	<u>\$10,482</u>	<input type="checkbox"/> Breakdown attached
	Date	Date	Total cost	
	From: <u>1/1/2018</u>	To: <u>12/1/2018</u>	<u>\$39,432</u>	<input type="checkbox"/> Breakdown attached
	Date	Date	Total cost	
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
	Date	Date	Total cost	

From: _____ Date	To: _____ Date	_____ Total cost	<input type="checkbox"/> Breakdown attached
3. Unanticipated or Unusually High O&M Costs during Review Period			
Describe costs and reasons: _____			
V. ACCESS AND INSTITUTIONAL CONTROLS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
A. Fencing			
1. Fencing Damaged	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Gates secured	<input type="checkbox"/> N/A
Remarks: _____			
B. Other Access Restrictions			
1. Signs and Other Security Measures	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A	
Remarks: <u>No trespassing signs are posted and fence gates are locked and in good condition</u>			
C. Institutional Controls (ICs)			
1. Implementation and Enforcement			
Site conditions imply ICs not properly implemented		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Site conditions imply ICs not being fully enforced		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Type of monitoring (e.g., self-reporting, drive by): <u>Self-reporting</u>			
Frequency: <u>Daily</u>			
Responsible party/agency: <u>PRP contractor</u>			
Contact <u>Chris Anthony (GHD)</u>			
Name	Title	Date	Phone no.
Reporting is up to date		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Reports are verified by the lead agency		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Specific requirements in deed or decision documents have been met		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Violations have been reported		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Other problems or suggestions: <input type="checkbox"/> Report attached			
2. Adequacy <input checked="" type="checkbox"/> ICs are adequate <input type="checkbox"/> ICs are inadequate <input type="checkbox"/> N/A			
Remarks: <u>Deed restrictions have been filed that prohibits any activity that would compromise remedy components. While the deed restrictions do not explicitly restrict installation of private wells or groundwater use, installation of any type of well unless it is part of the remedy is prohibited. An environmental covenant was finalized in June 2023 to meet the state requirements for establishing institutional controls on the affected properties.</u>			
D. General			
1. Vandalism/Trespassing	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident	
2. Land Use Changes On Site	<input checked="" type="checkbox"/> N/A		
3. Land Use Changes Off Site	<input checked="" type="checkbox"/> N/A		
VI. GENERAL SITE CONDITIONS			
A. Roads <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1. Roads Damaged	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Roads adequate	<input type="checkbox"/> N/A
B. Other Site Conditions			
Remarks: _____			
VII. LANDFILL COVERS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
A. Landfill Surface			
1. Settlement (low spots)	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Settlement not evident	
Area extent: _____		Depth: _____	
2. Cracks	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Cracking not evident	
Lengths: _____	Widths: _____	Depths: _____	
3. Erosion	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Erosion not evident	
Area extent: _____		Depth: _____	
4. Holes	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Holes not evident	
Area extent: _____		Depth: _____	
5. Vegetative Cover	<input checked="" type="checkbox"/> Grass	<input checked="" type="checkbox"/> Cover properly established	

<input checked="" type="checkbox"/> No signs of stress		<input type="checkbox"/> Trees/shrubs (indicate size and locations on a diagram)	
6.	Alternative Cover (e.g., armored rock, concrete)	<input checked="" type="checkbox"/> N/A	
7.	Bulges Area extent: _____	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Bulges not evident Height: _____
8.	Wet Areas/Water Damage <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade	<input checked="" type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map	Area extent: _____ Area extent: _____ Area extent: _____ Area extent: _____
9.	Slope Instability <input checked="" type="checkbox"/> No evidence of slope instability	<input type="checkbox"/> Slides	<input type="checkbox"/> Location shown on site map
B. Benches <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	Flows Bypass Bench Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay
2.	Bench Breached Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay
3.	Bench Overtopped Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay
C. Letdown Channels <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			
1.	Settlement (Low spots) Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of settlement Depth: _____
2.	Material Degradation Material type: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of degradation Area extent: _____
3.	Erosion Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of erosion Depth: _____
4.	Undercutting Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of undercutting Depth: _____
5.	Obstructions <input type="checkbox"/> Location shown on site map Size: _____ Remarks: _____	Type: _____ Area extent: _____	<input type="checkbox"/> No obstructions
6.	Excessive Vegetative Growth <input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels does not obstruct flow <input type="checkbox"/> Location shown on site map Remarks: _____	Type: _____ Area extent: _____	
D. Cover Penetrations <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Gas Vents <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Evidence of leakage at penetration Remarks: _____	<input type="checkbox"/> Active <input type="checkbox"/> Functioning	<input type="checkbox"/> Passive <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance <input checked="" type="checkbox"/> N/A
2.	Gas Monitoring Probes		

	<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input type="checkbox"/> Good condition
	<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs maintenance	<input checked="" type="checkbox"/> N/A
3.	Monitoring Wells (within surface area of landfill)			
	<input checked="" type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input checked="" type="checkbox"/> Good condition
	<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A
	Remarks: <u>There are no site groundwater COCs therefore, monitoring is no longer warranted.</u>			
4.	Extraction Wells Leachate			
	<input checked="" type="checkbox"/> Properly secured/locked	<input checked="" type="checkbox"/> Functioning	<input checked="" type="checkbox"/> Routinely sampled	<input checked="" type="checkbox"/> Good condition
	<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A
	Remarks: <u>Leachate is no longer required to be sampled as of 2016.</u>			
5.	Settlement Monuments	<input type="checkbox"/> Located	<input type="checkbox"/> Routinely surveyed	<input checked="" type="checkbox"/> N/A
	Remarks: _____			
E. Gas Collection and Treatment		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1.	Gas Treatment Facilities			
	<input type="checkbox"/> Flaring	<input type="checkbox"/> Thermal destruction	<input type="checkbox"/> Collection for reuse	
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance		
	Remarks: _____			
2.	Gas Collection Wells, Manifolds and Piping			
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance		
	Remarks: _____			
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)			
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A	
	Remarks: _____			
F. Cover Drainage Layer		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1.	Outlet Pipes Inspected	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
	Remarks: _____			
2.	Outlet Rock Inspected	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
	Remarks: _____			
G. Detention/Sedimentation Ponds		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1.	Siltation	Area extent: _____	Depth: _____	<input type="checkbox"/> N/A
	<input type="checkbox"/> Siltation not evident			
	Remarks: _____			
2.	Erosion	Area extent: _____	Depth: _____	
	<input type="checkbox"/> Erosion not evident			
	Remarks: _____			
3.	Outlet Works	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
	Remarks: _____			
4.	Dam	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
	Remarks: _____			
H. Retaining Walls		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1.	Deformations	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident	
	Horizontal displacement: _____	Vertical displacement: _____		
	Rotational displacement: _____			
	Remarks: _____			
2.	Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident	
	Remarks: _____			
I. Perimeter Ditches/Off-Site Discharge		<input checked="" type="checkbox"/> Applicable	<input type="checkbox"/> N/A	
1.	Siltation	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Siltation not evident	
	Area extent: _____	Depth: _____		

Remarks: _____		
2.	Vegetative Growth <input checked="" type="checkbox"/> Vegetation does not impede flow Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A Type: _____
3.	Erosion Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Erosion not evident Depth: _____
4.	Discharge Structure Remarks: _____	<input checked="" type="checkbox"/> Functioning <input type="checkbox"/> N/A
VIII. VERTICAL BARRIER WALLS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1.	Settlement Area extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Settlement not evident Depth: _____
2.	Performance Monitoring Type of monitoring: _____ <input type="checkbox"/> Performance not monitored Frequency: _____ Head differential: _____ Remarks: _____	<input type="checkbox"/> Evidence of breaching
IX. GROUNDWATER/SURFACE WATER REMEDIES <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
A. Groundwater Extraction Wells, Pumps and Pipelines <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1.	Pumps, Wellhead Plumbing and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____	
2.	Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____	
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks: _____	
B. Surface Water Collection Structures, Pumps and Pipelines <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1.	Collection Structures, Pumps and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance	
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance	
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks: _____	
1.	Treatment Train (check components that apply) <input type="checkbox"/> Metals removal <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Bioremediation <input type="checkbox"/> Air stripping <input type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Filters: _____ <input type="checkbox"/> Additive (e.g., chelation agent, flocculent): _____ <input type="checkbox"/> Others: _____ <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance <input type="checkbox"/> Sampling ports properly marked and functional <input type="checkbox"/> Sampling/maintenance log displayed and up to date <input type="checkbox"/> Equipment properly identified <input type="checkbox"/> Quantity of groundwater treated annually: _____ <input type="checkbox"/> Quantity of surface water treated annually: _____ Remarks: _____	
2.	Electrical Enclosures and Panels (properly rated and functional) <input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance	

Remarks: _____	
3. Tanks, Vaults, Storage Vessels	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs maintenance
Remarks: _____	
4. Discharge Structure and Appurtenances	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance
Remarks: _____	
5. Treatment Building(s)	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs repair
<input type="checkbox"/> Chemicals and equipment properly stored	
Remarks: _____	
6. Monitoring Wells (pump and treatment remedy)	<input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition
<input type="checkbox"/> All required wells located <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A	
Remarks: _____	
D. Monitoring Data	
1. Monitoring Data	<input type="checkbox"/> Is routinely submitted on time <input type="checkbox"/> Is of acceptable quality
2. Monitoring Data Suggests:	<input type="checkbox"/> Groundwater plume is effectively contained <input type="checkbox"/> Contaminant concentrations are declining
E. Monitored Natural Attenuation	
1. Monitoring Wells (natural attenuation remedy)	<input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition
<input type="checkbox"/> All required wells located <input type="checkbox"/> Needs maintenance <input checked="" type="checkbox"/> N/A	
X. OTHER REMEDIES	
If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.	
XI. OVERALL OBSERVATIONS	
A. Implementation of the Remedy	
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions). <u>The landfill was capped and fenced to prevent human and ecological exposure to waste. A dike was constructed to provide flood protection and institutional controls are in place to prevent disturbing the remedy. The 2020 ESD demonstrated that there are no site groundwater COCs therefore, groundwater no longer requires monitoring. Historical monitoring demonstrates that landfill wastes are contained and not released to groundwater.</u>	
B. Adequacy of O&M	
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <u>O&M activities include maintaining the landfill cap, security fencing and contingency measures for addressing any CWM that may surface. The O&M annual reports demonstrate the remedy is effective in containing contamination on site.</u>	
C. Early Indicators of Potential Remedy Problems	
Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. <u>No problems have been observed.</u>	
D. Opportunities for Optimization	
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.	

Optimization for the site remedy has occurred following the release of the 2020 ESD which supports that groundwater and stormwater monitoring is no longer required as there are no site groundwater COCs. Leachate monitoring is no longer required.

Participants:

Connor Keisling, EPA

Derek Payne, Battelle

Katie Leniski, Davenergy

Ryan Burdge, Skeo

Claire Marcussen, Skeo

APPENDIX G – SITE INSPECTION PHOTOS



Airco landfill looking northeast



Airco landfill looking northwest



Flood protection dike on the southeast end of Airco landfill



Surface water sampling location on the southeast end of Airco landfill



Airco landfill looking northwest



Western side of Airco landfill looking southwest



Flood protection dike northeastern side of Airco landfill

APPENDIX H – DEED RESTRICTIONS

NOTICE OF DEED RESTRICTIONS

THIS NOTICE OF DEED RESTRICTIONS is made this 20th day of January, 2000, by THE BOC GROUP, INC., a Delaware corporation, whose address is 575 Mountain Avenue, Murray Hill, New Jersey 07974 (the "Owner").

RECITALS:

A. The Owner is the owner in fee simple of that real property located in Marshall County, Kentucky, that comprises the Airco Superfund Site and that is more particularly described on Exhibit "A" attached hereto and shown on the drawing attached hereto as Exhibit "B", both of which are hereby incorporated by reference (the "Site").

B. The Site is the subject of a Consent Decree (the "Consent Decree") entered into by and among the Owner, the United States of America (the "USA"), acting at the request and on behalf of the Environmental Protection Agency (the "EPA"), and B. F. Goodrich, pursuant to that litigation styled United States of America v. The B. F. Goodrich Company and The BOC Group, Inc., filed in the United States District Court for the Western District of Kentucky, as Civil Action No. 89-0005-P(CS). Pursuant to the Consent Decree, the Owner has agreed to record in the Marshall County Court Clerk's Office this Notice of Deed Restrictions regarding the Site.

NOW THEREFORE, for and in consideration of the foregoing, the Owner declares on behalf of itself and subsequent owners of the Site, as follows:

1. The Site contains hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601.

RETURN TO:
Laura M. Ferguson
Greenebaum Doll & McDonald PLLC
333 W. Vine Street
Lexington, KY 40507

2. The Owner, its successors and assigns hereby covenant that the Site will not be used in any manner that would disturb the integrity of the final cover, the integrity of the containment or treatment system, or the function of any monitoring system on the Site, unless the EPA Regional Administrator determines that such disturbance is (a) necessary to the proposed use of the Site and will not increase the potential hazard to human health or the environment, or (b) necessary to reduce a threat to human health or the environment.

3. The Owner hereby grants permission to the USA, the EPA and the Settling Parties (as defined in the Consent Decree) and their respective authorized representatives to enter upon the Site for purposes of effectuating and monitoring all terms of the Consent Decree, performing any work required under the Consent Decree and the RODs, and performing the O&M activities (both as defined in the Consent Decree). The Owner agrees for itself, its successors and assigns, not to interfere with or disturb the USA's, the EPA's or the Settling Parties' performance of any work pursuant to the Consent Decree and the O&M activities; and the Owner further agrees to inform any person or entity that acquires any title, ownership, leasehold, easement, or other interest in the Site, or any portion thereof, or appurtenances thereto, of the requirements, conditions, and operative effect of Paragraph VI.F. of the Consent Decree.

4. *The restrictions and covenants set forth above shall run with the Site and shall be binding upon any and all persons, companies or entities and their successors and assigns who now or may hereafter acquire any title, ownership, leasehold, easement, or other interest in the Site or any portion thereof.*

THIS INSTRUMENT PREPARED BY:

Laura M. Ferguson

Laura M. Ferguson
Greenebaum Doll & McDonald PLLC
333 West Vine Street
Suite 1400
Lexington, KY 40507
Telephone: (606) 231-8500

STATE OF KENTUCKY, COUNTY OF MARSHALL
I, Dan Duke, Clerk of the County Court for the County and
Shirley Starnes, Clerk of the County Court for the County and
Stenoforesaid, certify that the foregoing Restrictions
was on the 25 day of Jan 2000
at 10:10 O'clock A.M., lodged for record, whereupon
the same, the foregoing and this certificate have duly re-
corded in my said office in Misc Book 75.
Page 461.
Given under my hand this 28 day of
Jan 2000
DAN DUKE/CLERK
BY Kristi Payton

EXHIBIT "A"

Tract Description
of
AIRCO SUPERFUND SITE

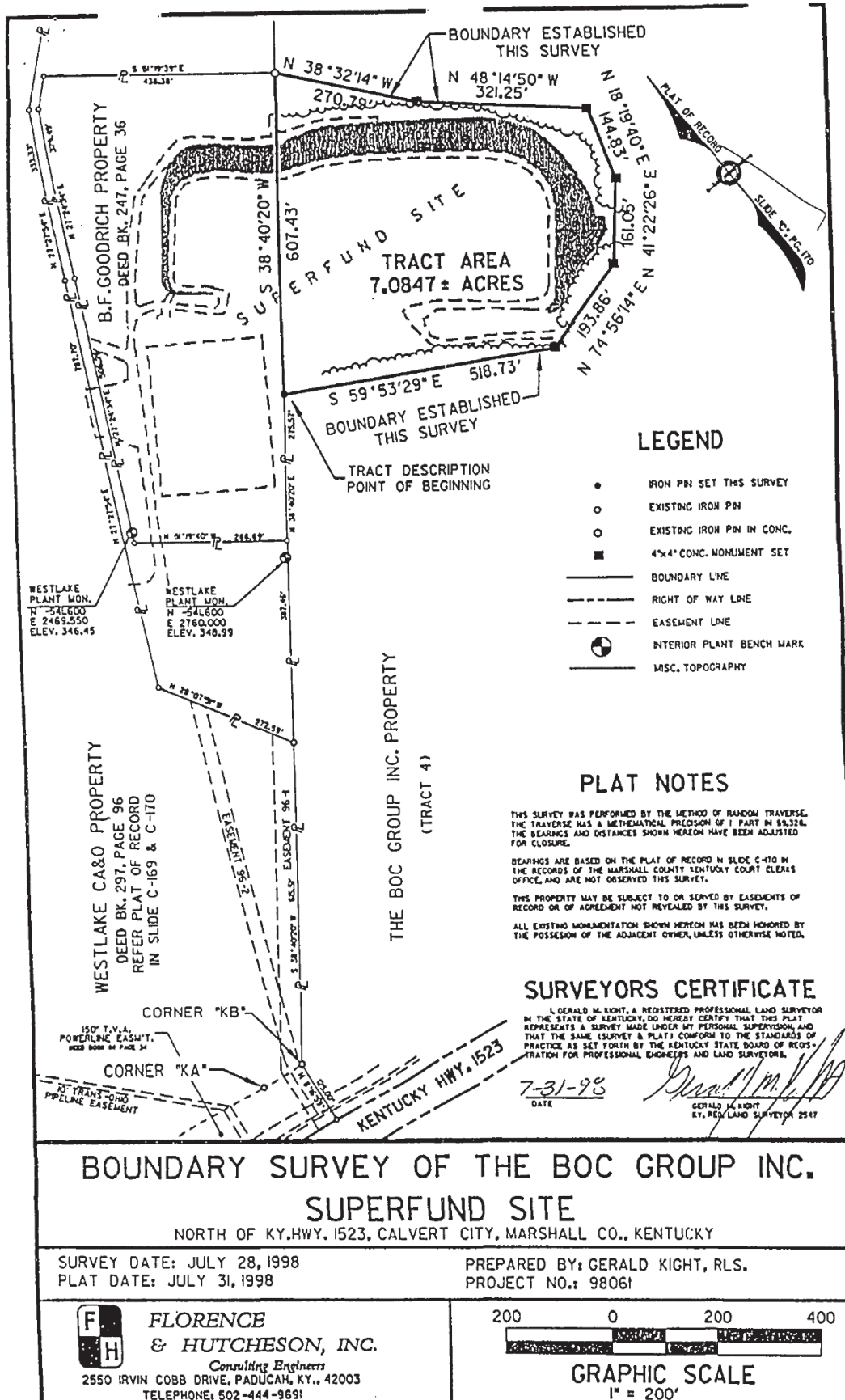
A parcel of land encompassing the processed area known as the Calvert City Superfund Site, located North of Kentucky Highway 1523, South of the Tennessee River, Calvert City, Marshall County, Kentucky, and being more particularly described as follows:

Beginning at an iron pin set in the East line of the lands now or formerly owned by B.F. Goodrich, said lands known as B.F. Goodrich Tract "E" as shown on the plat of record in Slide C-170 in the records of the Marshall County Court Clerk, said beginning iron pin being located North 38 degrees 40 minutes 20 seconds East a distance of 1278.54 feet from the iron pin in concrete known as Corner "KB" of the Paul M. Jones surveys; thence, from the point of beginning and with a new line, South 59 degrees 53 minutes 29 seconds East, a distance of 518.73 feet to a concrete monument; thence, North 74 degrees 56 minutes 14 seconds East, a distance of 193.86 feet to a concrete monument; thence, North 41 degrees 22 minutes 26 seconds East, a distance of 161.05 feet to a concrete monument; thence, North 18 degrees 19 minutes 40 seconds East, a distance of 144.83 feet to a concrete monument; thence, North 48 degrees 14 minutes 50 seconds West, a distance of 321.25 feet to a concrete monument; thence, North 38 degrees 32 minutes 14 seconds West, a distance of 270.79 feet to an existing iron pin found at the Northeast corner of the B.F. Goodrich Superfund Site encompassed by the aforementioned B.F. Goodrich Tract "E"; thence, with the East line of the said Tract "E", South 38 degrees 40 minutes 20 seconds West, a distance of 607.43 feet to the point of beginning. The above described parcel contains 7.0847 acres (308,610 sq. ft.).

Being a portion of the property conveyed to Airco, Inc. (n/k/a The BOC Group, Inc.), by virtue of (i) deed dated May 4, 1951, of record in Deed Book 85, Page 8 (ii) deed dated April 24, 1951, of record in Deed Book 83, Page 526, (iii) deed dated April 18, 1951, of record in Deed Book 83, Page 516, (iv) deed dated November 28, 1951, of record in Deed Book 89, Page 66, (v) deed dated February 10, 1953, of record in Deed Book 89, Page 122, (vi) deed dated January 14, 1953, of record in Deed Book 89, Page 94, and (vii) deed dated

:
January 17, 1953, of record in Deed Book 89, Page 96, all of record in the Marshall County Court Clerk's Office.

The above description has been prepared as the result of an actual on site survey performed under the supervision of Gerald M. Kight, Ky. R.L.S. 2547, on July 28, 1998, and shown on Exhibit B, "Boundary Survey of The BOC Group, Inc. Superfund Site," to this Notice of Deed Restrictions.



LEGEND

- IRON PIN SET THIS SURVEY
- EXISTING IRON PIN
- EXISTING IRON PIN IN CONC.
- 4"x4" CONC. MONUMENT SET
- BOUNDARY LINE
- - - RIGHT OF WAY LINE
- - - EASEMENT LINE
- ⊕ INTERIOR PLANT BENCH MARK
- MISC. TOPOGRAPHY

PLAT NOTES

THIS SURVEY WAS PERFORMED BY THE METHOD OF RANDOM TRAVERSE. THE TRAVERSE HAS A MATHEMATICAL PRECISION OF 1 PART IN 89,328. THE BEARINGS AND DISTANCES SHOWN HEREON HAVE BEEN ADJUSTED FOR CLOSURE.

BEARINGS ARE BASED ON THE PLAT OF RECORD M SLIDE C-170 IN THE RECORDS OF THE MARSHALL COUNTY KENTUCKY COURT CLERK'S OFFICE, AND ARE NOT OBSERVED THIS SURVEY.

THIS PROPERTY MAY BE SUBJECT TO OR SERVED BY EASEMENTS OF RECORD OR OF AGREEMENT NOT REVEALED BY THIS SURVEY.

ALL EXISTING MONUMENTATION SHOWN HEREON HAS BEEN HONORED BY THE POSSESSION OF THE ADJACENT OWNER, UNLESS OTHERWISE NOTED.

SURVEYORS CERTIFICATE

I, GERALD M. KIGHT, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF KENTUCKY, DO HEREBY CERTIFY THAT THIS PLAT REPRESENTS A SURVEY MADE UNDER MY PERSONAL SUPERVISION, AND THAT THE SAME (SURVEY & PLAT) CONFORM TO THE STANDARDS OF PRACTICE AS SET FORTH BY THE KENTUCKY STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

7-31-98
DATE

Gerald M. Kight
GERALD M. KIGHT
KY. REG. LAND SURVEYOR 2547

**BOUNDARY SURVEY OF THE BOC GROUP INC.
SUPERFUND SITE**
NORTH OF KY. HWY. 1523, CALVERT CITY, MARSHALL CO., KENTUCKY

SURVEY DATE: JULY 28, 1998
PLAT DATE: JULY 31, 1998

PREPARED BY: GERALD KIGHT, RLS.
PROJECT NO.: 98061

F H
FLORENCE & HUTCHESON, INC.
Consulting Engineers
2550 IRVIN COBB DRIVE, PADUCAH, KY., 42003
TELEPHONE: 502-444-9691

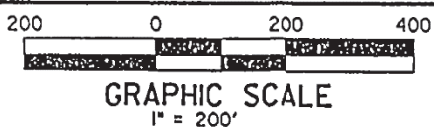


EXHIBIT B

SPECIAL WARRANTY DEED OF CORRECTION

THIS SPECIAL WARRANTY DEED OF CORRECTION is made and entered into this 21st day of July, 2000, by and between **THE BOC GROUP, INC.** (successor to Airco, Inc., which in turn was successor to Air Reduction Company, Inc.), a Delaware corporation with an address of 525 Mountain Avenue, Murray Hill, New Jersey 07974 ("Grantor"), and **WESTLAKE CA & O CORPORATION**, a Delaware corporation, with an address of 2801 Post Oak Boulevard, Houston, TX 77056 ("Grantee").

W I T N E S S E T H :

WHEREAS, the Grantor and Grantee have discovered that the sixth and seventh paragraphs of the Special Warranty Deed dated September 28, 1999, which is of record in Deed Book 313, Page 597 in the Marshall County Court Clerk's Office, were erroneously included in said Deed; and Grantor and Grantee desire to correct the error by executing this Special Warranty Deed of Correction deleting the sixth and seventh paragraphs of the September 28, 1999 Deed.

That for and in consideration of the sum of **THREE HUNDRED FORTY THOUSAND AND NO/100 DOLLARS (\$340,000.00)**, cash in hand paid by Grantee to Grantor, the receipt of which is hereby acknowledged, Grantor has bargained and sold and does hereby grant and convey unto Grantee, its successors and assigns forever, the following described real property located in Marshall County, Kentucky and being more particularly described on Exhibit "A" attached hereto and incorporated herein by reference (the "Property"). Grantee does hereby grant Grantor a non-exclusive easement for ingress and egress across a portion of the Property, more particularly described in Exhibit "B" attached hereto and incorporated herein.

TO HAVE AND TO HOLD the Property, together with all appurtenances and privileges thereunto belonging, unto the said Grantee, its successors and assigns forever.

Grantor does hereby release and relinquish unto Grantee, its successors and assigns, all of its right, title and interest in and to the Property, including dower and curtesy and all exemptions allowed by law, and does hereby covenant to and with said Grantee, its successors and assigns, that it will **WARRANT SPECIALLY** the title to said Property.

Provided, however, this conveyance and the covenants herein made are expressly subject to all restrictions and easements which may appear of record in the Marshall County Clerk's Office.

Grantee assumes and agrees to pay all ad valorem taxes assessed against the Property for the current fiscal year and all subsequent years, the current taxes and assessments to be prorated as of the date of transfer of this Deed.

Return to:
Cheryl L. Voll
Greenebaum Doll & McDonald PLLC
333 W. Vine Street, Suite 1400
Lexington, KY 40507

STATE OF TEXAS)
) SS:
COUNTY OF HARRIS)

The foregoing instrument was subscribed, sworn to, and acknowledged before me this 24th day of AUGUST, 2000, by ALBERT CHAO, as PRESIDENT of Westlake CA & O Corporation, a Delaware corporation, for and on behalf of said corporation.

My Commission expires: _____



Amy Satchu
Notary Public

THIS INSTRUMENT PREPARED BY:
Greenebaum Doll & McDonald, PLLC
333 West Vine Street, Suite 1400
Lexington, KY 40507
(606) 231-8500



By: Carolyn M. Brown
Michael L. Ades
Carolyn M. Brown

STATE OF KENTUCKY
SCT
COUNTY OF MARSHALL

I, Dan Duke, Clerk of the County Court of said County, do certify that the foregoing DEED OF CORRECTION was on the 13th day of SEPT, 2000 lodged in my office for recd

Whereupon the same, the foregoing and this certificate have been duly recorded in my office in _____
DEED Book No. 321 page 204.

Given under my hand this the 15th day of SEPT, 2000

Pd. \$22.00 recording

DAN DUKE, CLERK
BY Kristi Page D

EXHIBIT "A"

(Property Description)

Tract 4

Beginning at a point, said point being the southeast corner of BOC Tract 1B and also being South 81 degrees 43 minutes 00 seconds East 3879.78 feet removed from concrete monument #1358,

thence North 38 degrees 41 minutes 49 seconds East, 2383.98 feet,
thence North 38 degrees 41 minutes 49 seconds East, 131.46 feet,
thence South 76 degrees 40 minutes 00 seconds East, 48.41 feet,
thence South 77 degrees 32 minutes 00 seconds East, 100.04 feet,
thence South 76 degrees 23 minutes 00 seconds East, 100.01 feet,
thence South 77 degrees 39 minutes 00 seconds East, 105.73 feet,
thence South 79 degrees 32 minutes 00 seconds East, 86.60 feet,
thence South 76 degrees 57 minutes 00 seconds East, 113.75 feet,
thence South 78 degrees 21 minutes 00 seconds East, 190.54 feet,
thence South 76 degrees 34 minutes 00 seconds East, 100.24 feet,
thence South 71 degrees 20 minutes 00 seconds East, 98.11 feet,
thence South 77 degrees 55 minutes 00 seconds East, 111.17 feet,
thence South 75 degrees 42 minutes 00 seconds East, 89.64 feet,
thence South 76 degrees 37 minutes 00 seconds East, 107.71 feet,
thence South 72 degrees 39 minutes 00 seconds East, 147.58 feet,
thence South 74 degrees 05 minutes 00 seconds East, 100.04 feet,
thence South 71 degrees 48 minutes 00 seconds East, 100.00 feet,
thence South 71 degrees 14 minutes 00 seconds East, 101.36 feet,
thence South 70 degrees 29 minutes 00 seconds East, 99.99 feet,
thence South 71 degrees 03 minutes 00 seconds East, 100.02 feet,
thence South 67 degrees 55 minutes 00 seconds East, 89.76 feet,
thence South 21 degrees 31 minutes 00 seconds West, 79.99 feet.
thence South 21 degrees 31 minutes 00 seconds West, 2094.49 feet,

thence South 21 degrees 18 minutes 00 seconds West 689.02 feet,
thence 1279.58 feet along an arc to the left, having a radius of 965.83 feet, the chord of which is
North 43 degrees 45 minutes 45 seconds West, 1188.03 feet,
thence North 81 degrees 43 minutes 00 seconds West, 1657.11 feet,
thence North 8 degrees 17 minutes 00 seconds East, 125.00 feet, to the point of beginning.
The above described parcel contains 129.181 acres.

Excepted from the above described Tract 4 is the following parcel (the "Superfund Parcel"):

A parcel of land located north of Kentucky Highway 1523, south of the Tennessee River, and east of the Westlake-B.F. Goodrich Industrial Complex, Calvert City, Marshall County, Kentucky, and being more particularly described as follows:

Beginning at an iron pin set in the east line of the lands now or formerly owned by B.F. Goodrich, said lands known as Tract "E" as shown on the plat of record in slide C-166 in the record of the Marshall County Court Clerk. The beginning point is located, North 38 degrees 40 minutes 15 seconds East, a distance of 875.76 feet from the iron pin in concrete known as Corner "KB";
Thence, from the point of beginning and with the said east line of the B.F. Goodrich property, North 38 degrees 40 minutes 20 seconds East, passing iron pins at 127.24 feet, 195.30 feet, 402.81 feet, 905.69 feet, 1010.24 feet, and 1269.81 feet, a total distance of 1438.95 feet to an iron pin; thence, with a new line through the lands now or formerly owned by The BOC Group, Inc., South 39 degrees 20 minutes 48 seconds East, a distance of 224.69 feet to a concrete monument; thence, South 18 degrees 28 minutes 21 seconds East, a distance of 623.09 feet to a concrete monument; thence, South 35 degrees 44 minutes 55 seconds West, a distance of 260.33 feet to a concrete monument; thence, South 49 degrees 54 minutes 50 seconds East, a distance of 405.39 feet to a concrete monument; thence, South 40 degrees 33 minutes 03 seconds West, a distance of 147.45 feet to a concrete monument; thence, North 51 degrees 42 minutes 11 seconds West, 406.36 feet to a concrete monument; thence, South 61 degrees 12 minutes 03 seconds West, a distance of 356.67 feet to a concrete monument; thence, North 77 degrees 43 minutes 47 seconds West, a distance of 685.42 feet back to the point of beginning.

The above described Superfund Parcel contains 19.8387 acres more or less (864,176 sq. ft.), of which 7.0847 acres comprise the Calvert City Superfund Site that is subject to a Consent Decree entered in United States of America v. The B.F. Goodrich Company and The BOC Group, Inc., filed in the United States District Court for the Western District of Kentucky, as Civil Action No. 89-0005-P(CS), and a Notice of Deed Restrictions dated January 20, 2000 and of record in Misc.Book 75, Page 461 in the Marshall County Court Clerk's Office.

Tract 7

Beginning at a point, said point being a concrete monument located in the east line of said property,
thence North 21 degrees 56 minutes 00 seconds East, 2814.77 feet,
thence North 32 degrees 46 minutes 00 seconds West, 364.84 feet,
thence North 57 degrees 55 minutes 00 seconds West, 905.79 feet,
thence North 57 degrees 55 minutes 00 seconds West, 25.50 feet,
thence South 21 degrees 18 minutes 00 seconds West, 111.98 feet,
thence South 21 degrees 18 minutes 00 seconds West, 50.31 feet,
thence South 21 degrees 18 minutes 00 seconds West, 200.98 feet,
thence 459.99 feet along an arc to the right, having a radius of 965.83 feet, the chord of which is
South 7 degrees 46 minutes 22 seconds West, 455.65 feet,

thence South 21 degrees 25 minutes 00 seconds West, 1426.76 feet,
thence South 75 degrees 40 minutes 00 seconds East, 2.02 feet,
thence South 21 degrees 25 minutes 00 seconds West, 151.15 feet,
thence South 75 degrees 40 minutes 00 seconds East, 10.58 feet,
thence South 21 degrees 25 minutes 00 seconds West, 1383.54 feet,
thence South 64 degrees 33 minutes 00 seconds East, 118.48 feet,
thence South 64 degrees 33 minutes 00 seconds East, 131.95 feet,
thence South 64 degrees 33 minutes 00 seconds East, 45.16 feet,
thence South 65 degrees 05 minutes 00 seconds East, 86.71 feet,
thence North 20 degrees 10 minutes 00 seconds East, 56.26 feet,
thence South 68 degrees 22 minutes 00 seconds East, 562.60 feet,
thence North 22 degrees 35 minutes 00 seconds East, 534.46 feet,
thence South 70 degrees 02 minutes 00 seconds East, 110.81 feet, the point of beginning.

The above described parcel contains 89.566 acres (3,901,512 sq. ft.).

Tracts 4 and 7 being the same property conveyed to Air Reduction Company, Inc. by virtue of (i) Deed dated May 4, 1951, of record in Deed Book 85, Page 8, (ii) Deed dated April 24, 1951, of record in Deed Book 83, Page 526, (iii) Deed dated April 18, 1951, of record in Deed Book 83, Page 516, (iv) Deed dated November 28, 1952, of record in Deed Book 89, Page 66, (v) Deed dated February 10, 1953, of record in Deed Book 89, Page 122, (vi) Deed dated January 14, 1953, of

record in Deed Book 89, Page 94, and (vii) Deed dated January 17, 1953, of record in Deed Book 89, Page 96; all of record in the Marshall County Court Clerk's Office.

EXHIBIT "B"

(Easement Description)

A strip of land being thirty feet wide extending from the north line of Kentucky Highway 1523, to the east boundary of the Superfund Parcel (as defined in Exhibit "A"), south of the Tennessee River, and east of the Westlake-B.F. Goodrich Industrial complex, Calvert City, Marshall County, Kentucky, and being more particularly described as follows:

Beginning at a point in the north right of way line of Kentucky Highway 1523, said point being located South 8 degrees 16 minutes 59 seconds West, 125.00 feet and North 81 degrees 43 minutes 01 seconds West 792.85 feet from the iron pin in concrete known as Corner "KB"; thence, leaving the north right of way line of Kentucky Highway 1523, North 43 degrees 47 minutes 47 seconds East, a distance of 1004.78 feet to a point; thence, North 33 degrees 24 minutes 46 seconds East, a distance of 96.27 feet to a point; thence, North 53 degrees 01 minutes 53 seconds West, a distance of 128.96 feet to a point in the east boundary line of the Superfund Parcel; thence, with the said east boundary line, North 61 degrees 12 minutes 03 seconds East, a distance of 32.90 feet to a point; thence, South 53 degrees 01 minutes 53 seconds East, a distance of 143.65 feet to a point; thence, South 33 degrees 24 minutes 46 seconds West, a distance of 127.19 feet to a point; thence, South 43 degrees 47 minutes 47 seconds West, a distance of 986.10 feet to a point in the north right of way line of Kentucky Highway 1523; thence, with the said north right of way line, North 81 degrees 43 minutes 01 seconds West, a distance of 36.86 feet back to the point of beginning and containing 0.856 acres more or less.

APPENDIX I – ENVIRONMENTAL COVENANT

ENVIRONMENTAL COVENANT

Messer LLC as successor to **The BOC Group, Inc.**, as successor to **AIRCO, Inc.**, as successor to **Air Reduction Co., Inc.**, 200 Somerset Corporate Blvd., Suite 7000, Bridgewater, New Jersey, 08807 (hereinafter "Grantor") grants an Environmental Covenant (hereinafter "Covenant") this 6th day of October, 2022 to the following Holder(s) pursuant to Kentucky Revised Statutes (KRS) Chapter 224 Subchapter 80: **Messer LLC**, 200 Somerset Corporate Blvd., Suite 7000, Bridgewater, New Jersey, 08807 (hereinafter "Grantee").

WHEREAS, Grantor is the owner of certain real property located at north of Kentucky Highway 1523 Southeast of the Westlake CA&O Property, Calvert City, Kentucky, (hereinafter "the Property") being a portion of the real property more particularly described in Deed Book 85 Page 8 and Deed Book 83, Page 526, and as shown on the plat of record in Plat Cabinet C Slide 169 and Slide 170, all of record in the Marshall County Clerk's Office, and more particularly described as follows:

Commencing from a found iron pin set in concrete and known as Corner "KB" of the Calvert City Industrial Complex surveys of Paul M. Jones, said iron pin in concrete being located at the Southeastern most corner of the lands now or formerly owned by Westlake CA&O as recorded in Deed Book 297, Page 96, and as shown on the plat of record in Plat Cabinet C Slide 169, and Slide 170, of the records of the Marshall County, Kentucky, Court Clerk's Office;

Thence, with the Eastern line of the said Westlake CA&O property, North 38° 40' 20" East a distance of 615.51 feet to a found iron pin set in concrete;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 260.25 feet to an iron pin with a surveyors cap set at the Southwestern corner of the herein describe tract of land and the true point of beginning;

Thence, from the point of beginning and continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 127.24 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 68.06 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 207.51 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 502.88 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 104.55 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 259.57 feet to a found iron pin with a surveyors cap;

Thence, continuing with the said Eastern line of the Westlake CA&O property, North 38° 40' 20" East a distance of 169.12 feet to an iron pin and surveyors cap set;

Thence, South 39° 20' 48" East a distance of 224.69 feet to a found 4" concrete monument with a surveyors cap;

Thence, South 18° 28' 21" East a distance of 623.09 feet to a found 4" concrete monument with a surveyors cap;

Thence, South 35° 44' 23" West a distance of 260.29 feet to a found 4" concrete monument with a surveyors cap;

Thence, South 49° 54' 38" East a distance of 405.36 feet to a found 4" concrete monument with a surveyors cap;

Thence, South 40° 33' 03" West a distance of 147.45 feet to a found 4" concrete monument with a surveyors cap;

Thence, North 51° 42' 11" West a distance of 406.36 feet to a found 4" concrete monument with a surveyors cap;

Thence, South 61° 12' 03" West a distance of 356.67 feet to a found 4" concrete monument with a surveyors cap;

Thence, North 77° 43' 47" West a distance of 685.42 feet back to the point of beginning.

The above-described parcel contains 19.8384 acres more or less (864,171 sq. ft.).

All bearings referred to in this description and the associated survey are based on the adjacent plats of record as filed in Cabinet C Slide 169, and Slide 170 of the records of the Marshall County, Kentucky, Court Clerk's Office.

WHEREAS, this instrument is an Environmental Covenant developed and executed pursuant to KRS 224.80-100 to KRS 224.80-210;

WHEREAS, pursuant to a Record of Decision ("ROD") for the Airco Superfund Site, dated June 24, 1988, and Consent Decree issued by the United States Environmental Protection Agency, Region 4 ("USEPA"), dated June 29, 1992, the Site is the subject of

enforcement and/or remedial action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and KRS Chapter 224;

WHEREAS, Airco began disposing of industrial waste in a slough located along the south side of the Tennessee River in 1959 (hereinafter "Airco Landfill"). Airco reportedly disposed of 18,000 tons of wastes, contaminated with caustics, acids, volatile organic compounds, zinc, mercuric acid, and mercuric chloride. In 1971, Airco sold their Calvert City operations to Air Products and Chemicals. Air Products continued using the disposal site, reportedly disposing of an additional 14,000 tons of coal ash, polyvinyl chloride solids, and ferric hydroxide sludges. More specifically, the release occurred on and impacted the area of the Property (hereinafter "the Impacted Area"), more particularly described as follows:

Beginning at an iron pin set in the East line of the lands now or formerly owned by B.F. Goodrich, said lands known as B.F. Goodrich Tract "E" as shown on the plat of record in Slide C-170 in the records of the Marshall County Court Clerk, said beginning iron pin being located North 38 degrees 40 minutes 20 seconds East a distance of 1278.54 feet from the from pin in concrete known as Corner "KB" of the Paul M. Jones surveys; thence, from the point of beginning and with a new line, South 59 degrees 53 minutes 29 seconds East, a distance of 518.73 feet to a concrete monument; thence, North 74 degrees 56 minutes 14 seconds East, a distance of 193.86 feet to a concrete monument; thence, North 41 degrees 22 minutes 26 seconds East, a distance of 161.05 feet to a concrete monument; thence, North 18 degrees 19 minutes 40 seconds East, a distance of 144.83 feet to a concrete monument; thence, North 48 degrees 14 minutes 50 seconds West, a distance of 321.25 feet to a concrete monument; thence, North 38 degrees 32 minutes 14 seconds West, a distance of 270.79 feet to an existing iron pin found at the Northeast corner of the B.F. Goodrich Superfund Site encompassed by the aforementioned B.F. Goodrich Tract "E"; thence, with the East line of the said Tract "E", South 38 degrees 40 minutes 20 seconds West, a distance of 607.43 feet to the point of beginning. The above-described parcel contains 7.0847 acres (308,610 square feet).

Being a portion of the property conveyed to Airco, Inc. (n/k/a The BOC Group, Inc.), by virtue of (i) deed dated May 4, 1951, of record in Deed Book 85, Page 8, (ii) deed dated April 24, 1951, of record in Deed Book 83, Page 526, (iii) deed dated April 18, 1951, of record in Deed Book 83, Page 516, (iv) deed dated November 28, 1951, of record in Deed Book 89, Page 66, (v) deed dated February 10, 1953, of record in Deed Book 89, Page 122, (vi) deed dated January 14, 1953, of record in Deed Book 89, Page 94, and (vii) deed dated January 17, 1953, of record in Deed Book 89, Page 96, all of record in the Marshall County Court Clerk's Office.

WHEREAS, Grantor has proposed and implemented a Remedial Design (hereinafter "the Plan") to correct the effects of the release/disposal which includes controlling exposure to the hazardous waste, hazardous constituents, hazardous substances, pollutants, or contaminants by restricting the use of the Property and the activities on the Property;

WHEREAS, Airco Landfill waste material will remain on the Property after implementation of the Plan;

WHEREAS, as part of the Plan, USEPA and KDEP have reviewed and approved a long-term Operations and Maintenance Plan (hereinafter "O&M Plan") for the Airco Landfill, which governs ongoing activities at the site. The O&M Plan may be amended from time to time to address changes to conditions at the Property. Amendments to the O&M Plan are reviewed and approved by USEPA and KDEP;

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by placing restrictions on the Property to reduce the risk to human health to below the target risk levels for those hazardous wastes, hazardous constituents, substances, pollutants, or contaminants that remain on the Property. In particular, a notice has been placed on the property deed prohibiting the use of the property from residential use or installation of private wells for potable use and land use/activity restrictions, which prohibits the disturbance of the landfill cover; and

WHEREAS, further information concerning the release and the activities to correct the effects of the release may be obtained by contacting the Custodian of Records of the Kentucky Division of Waste Management at 300 Sower Boulevard, Frankfort, Kentucky 40601. Records concerning the Airco Superfund Site may be found under EPA ID Number KYD041981010.

NOW, THEREFORE, Grantor hereby grants this Environmental Covenant to the Holder, and declares that the Property shall hereinafter be bound by, held, sold, used, improved, occupied, leased, hypothecated, encumbered, and/or conveyed subject to the following requirements set forth in paragraphs 1 through 3 below:

1. **DEFINITIONS**

A. **Owner.** "Owner" means Messer LLC and Messer LLC's successors and/or assigns in interest.

B. **Residential Use.** "Residential Use" includes single family or multifamily residences; child or adult care facilities; nursing home or assisted living facilities and any type of educational purpose for children/young adults in grades kindergarten through twelfth grade.

2. **USE RESTRICTIONS**

A. **Prohibited Uses.** No Residential Use of the Property shall be permitted.

B. **Prohibited Activities.**

i. Groundwater at the Property shall not be used for drinking or other domestic purposes within the entire property.

ii. Except as necessary to protect human health, safety or the environment, no action shall be taken, allowed, suffered, or omitted on the Property if such action or omission is reasonably likely to:

- a. Create a risk of migration of hazardous substances, pollutants or contaminants or a potential hazard to human health or the environment; or
- b. Result in a disturbance of the structural integrity of any engineering controls designed or utilized at the Property to contain hazardous substances, pollutants or contaminants or limit human exposure to hazardous substances, pollutants or contaminants;

iii. Disturbance of the cap. Prior to any disturbance of any approved cap placed on the Property within the Impacted Area that is inconsistent with the most recently approved O&M Plan, the Owner shall submit to the Director, Kentucky Division of Waste Management, a written rationale for the disturbance and detailed plans of the proposed construction for their review and written approval. No such disturbance is permitted without this prior written approval.

iv. Soil Disturbances. Soil at the property within the Impacted Area shall not be disturbed in any manner inconsistent with the Plan and the most recently approved O&M Plan without the Owner obtaining prior approval of the Director, Kentucky Division of Waste Management.

v. Construction. No building shall be constructed on the Property within the Impacted Area without the Owner obtaining prior approval of the Director, Kentucky Division of Waste Management.

3. **GENERAL PROVISIONS**

A. Restrictions to Run with the Land. This Environmental Covenant runs with the land pursuant to KRS 224.80-140; is perpetual unless modified or terminated pursuant to the terms of this Covenant; is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof; and inures to the benefit of and passes with each and every portion of the Property; and binds the Owner, the Holder, all persons using the land, all persons, their heirs, successors and assigns having any right, title or interest in the Property, or any part thereof who have subordinated those interests to this Environmental Covenant, and all persons, their heirs, successors and assigns who obtain any right, title or interest in the Property, or any part thereof after the recordation of this Environmental Covenant.

B. Conveyances of the Property. Owner shall notify the Director of the Kentucky Division of Waste Management at least thirty (30) days in advance of any proposed grant, transfer, or conveyance of any interest in any or all of the Property. Notice shall include the name address and telephone number of the prospective transferee,

a copy of the proposed deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the Property being transferred.

C. Incorporation into Deeds and Leases. Each instrument hereafter conveying any interest in the Property or any portion of the Property shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recorded location of this Environmental Covenant. The notice shall be substantially in the following form:

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT, DATED _____, 20_____, RECORDED IN THE OFFICIAL RECORDS OF THE MARSHALL COUNTY CLERK'S OFFICE IN MISCELLANEOUS BOOK _____, PAGE _____.

D. Zoning Changes. Owner shall notify the Director, Kentucky Division of Waste Management simultaneously when any application is submitted to a local government for a building permit for the Property. Owner shall notify the Kentucky Division of Waste Management of any proposed change in the land use for the Property.

E. Compliance Certification. Owner shall submit an annual letter to the Director of the Kentucky Division of Waste Management, on the anniversary of the date this Covenant was signed by the Grantor, detailing the Owner compliance, and any lack of compliance with the terms of the Covenant.

F. Right of Access. Owner hereby grants the Kentucky Energy and Environment Cabinet, its agents, contractors and employees the right of access to the Property for implementation or enforcement of this Environmental Covenant.

G. Representations and Warranties. Grantor hereby represents and warrants to the other signatories hereto:

i. that the Grantor has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;

ii. that the Grantor is the sole owner of the Property and holds fee simple title which is free, clear and unencumbered;

iii. that the Grantor have identified all other parties that hold any interest (e.g., encumbrances) in the Property and notified such parties of the Grantor' intention to enter into this Environmental Covenant;

iv. that the Grantor has complied with all public notice requirements in KRS 224.80-110;

v. that this Environmental Covenant will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Grantor is a party, by which Grantor may be bound or affected;

vi. that this Environmental Covenant will not materially violate or contravene any zoning law or other law regulating use of the Property; and

vii. that this Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by a recorded instrument that has priority over the Environmental Covenant.

H. Compliance Enforcement. The terms of the Environmental Covenant may be enforced by the Kentucky Energy and Environment Cabinet or any person identified in KRS 224.80-200 in accordance with applicable law. Failure to timely enforce compliance with this Environmental Covenant or the use limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict the Kentucky Energy and Environment Cabinet from exercising any authority under applicable law.

I. Amendment/Termination. This Environmental Covenant runs with the land and is perpetual, unless modified or terminated in accordance with KRS 224.80- 180 or KRS 224.80-190. The term "Amendment" as used in this Environmental Covenant, shall mean any changes to the Environmental Covenant, including the activity and use limitations set forth herein, or the elimination of one or more activity and use limitations when there is at least one limitation remaining. The term "Termination" as used in this Environmental Covenant, shall mean the elimination of all activity and use limitations set forth herein and all other obligations under this Environmental Covenant.

J. Notices. Any document or communication required to be sent to Kentucky Energy and Environment Cabinet or the Director, Division of Waste Management under this Covenant shall be sent to:

Director, Division of Waste Management
Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, KY 40601

Any document or communication required to be sent to the United States Environmental Protection Agency (USEPA) under this Covenant shall be sent to:

Director, Superfund Division
The United States Environmental
Protection Agency
Region 4

61 Forsyth Street
Atlanta, GA 30303

K. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

L. Governing Law. This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the Commonwealth of Kentucky.

M. Recordation. Within ten (10) business days after the date of the final required signature upon this Environmental Covenant, Grantor shall file this Environmental Covenant in the county clerk's office in each county that contains any portion of the real property subject to this environmental covenant.

N. Effective Date. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Property with the Marshall County Clerk's Office.

O. Distribution of Environmental Covenant. The Grantor(s) shall within thirty (30) days of filing this Environmental Covenant in the Marshall County Clerk's Office, distribute a file and date stamped copy of the recorded Environmental Covenant to the following persons: Director, Kentucky Division of Waste Management, City Administrator or Manager of the City of Calvert City, Judge Executive of Marshall county, every Holder of this Environmental Covenant, each person who is in possession of the Property, each person who holds a recorded interest in the Property, and each person who signed this Environmental Covenant.

P. Cabinet and Division References. All references to the Kentucky Energy and Environment Cabinet and the Kentucky Division of Waste Management shall include successor agencies/departments/divisions or other successor entities.

Property owner has caused this Environmental Covenant to be executed pursuant to KRS Chapter 224.80-100 to KRS 224.80-210 on this 6th day of October, 2022.

IN TESTIMONY WHEREOF, the parties have hereunto set their hands this the day and year first above written.

[SIGNATURE PAGES FOLLOW]

MESSER LLC
Grantor, Grantee and Holder

By:



Name: James J. (Joe) Brister

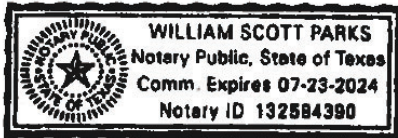
Title: V.P. HSEQ, Messer Americas

Date: October 6, 2022

STATE OF TEXAS

COUNTY OF
MONTGOMERY

The foregoing Environmental Covenant was acknowledged before me by
MESSER LLC, by James Brister, its Vice President
this the 7 day of October, 2022.



William Scott Parks
Notary Public

My Commission Expires: 7/23/24

This Instrument Prepared by:

CARTER & CARTER


GEORGE M. CARTER
1113 Poplar Street
P.O. Box 259
Benton, KY 42025
(270) 527-0755
gcarter@occlawfirm.com

KENTUCKY ENERGY AND ENVIRONMENT CABINET

This Environmental Covenant, is hereby approved by the Kentucky Energy and Environment Cabinet this 8th day of May, 2023.

By Gary Hudson for Tammi Hudson 5-8-23
Tammi Hudson P.E., Director, Date
Division of Waste Management

STATE OF KENTUCKY)
COUNTY OF Franklin)

The foregoing Environmental Covenant [and attached Subordination Agreement] was acknowledged before me by Gary Hudson for Tammi Hudson, P.E., this the 8th day of May, 2023.

Don Harmon, Jr.
Notary Public # 624522

My Commission Expires: 6/4/23

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The United States Environmental Protection Agency hereby executes the Environmental Covenant to acknowledge that it has reviewed and accepted this document.

By Chaffins, Randall
Digitally signed by Chaffins, Randall
Date: 2023.06.28 08:23:22 -04'00'

Date: 6/28/23

Randall Chaffins, Acting Director
Superfund Division
United States Environmental Protection Agency

COMM Pd.\$ 64 Rec. fee \$ _____ Tax _____

COUN Book Name: MISC
Book Number: 188

etc

Page Number: 647-657(11)

certify if
that I ha
20 _____

CRISSY GREER

MARSHALL COUNTY

6/30/2023, 12:48:55 PM

Kristi Edwards, DC



1096347

If County Court, do
file for record, and

County Clerk