



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

PERMIT
FOR CORRECTIVE ACTION

MARYLAND ENVIRONMENTAL SERVICES (MES) HAWKINS POINT
HAZARDOUS WASTE LANDFILL
BALTIMORE, MARYLAND
EPA ID NO. MDD 000 731 356

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
PERMIT
FOR CORRECTIVE ACTION;
PURSUANT TO THE RESOURCE CONSERVATION AND RECOVERY ACT
AS AMENDED BY THE HAZARDOUS AND SOLID WASTE
AMENDMENTS OF 1984**

Permittee: Maryland Environmental Services (MES) Hawkins Point Hazardous Waste Landfill

Permit Number: MDD 000 731 356

Facility Location: Baltimore, Maryland

The United States Environmental Protection Agency (EPA) under the authority of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. §§ 6901-6992k, and regulations promulgated thereunder and set forth at 40 C.F.R. Parts 260-271, has prepared this Permit for Corrective Action (Corrective Action Permit) for the facility operated by Maryland Environmental Services (hereinafter Permittee or MES) Hawkins Point Hazardous Waste Landfill located on Quarantine Road within Baltimore, Maryland 21226 at 76° 32' 58" West Longitude and 39° 12' 29" North Latitude (Facility).

The complete RCRA permit for purposes of 3005(c) of RCRA, 42 U.S.C. § 6925(c), consists of two portions: this Corrective Action Permit, issued by EPA which addresses the provisions of HSWA, and the Facility's Controlled Hazardous Substance Permit, MDD A-264 (Post-Closure Permit or Permit), issued by the Maryland Department of the Environment (MDE), which address the provisions of the Code of Maryland Regulations (COMAR) 26.13, for which the State has received authorization under Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), to administer and enforce in lieu of the federal hazardous waste management program under RCRA. As of the date of issuance of this Permit, the State has not received authorization to administer the corrective action provisions of HSWA. This Permit, which addresses corrective action provisions of HSWA for which EPA is the implementing authority in Maryland, will be enforced by EPA. The Post-Closure Permit will be enforced by MDE, but EPA may also exercise its enforcement discretion if and when appropriate.

EPA has determined that protection of human health and the environment has been achieved at the Facility and will be maintained as long as MES continues to perform operation and maintenance activities and maintains and complies with institutional controls as required in the Post-Closure Permit. EPA has determined the Post-Closure Permit includes all conditions necessary for MES to meet its corrective action obligations under RCRA/HSWA.

The Permittee shall comply with all terms and conditions set forth in this Corrective Action Permit, including the Post-Closure Permit attached hereto. Additionally, the Permittee shall comply with all applicable federal regulations, including 40 C.F.R. Parts 260 through 264,

Part 266, Part 268, Part 270, Part 273 and Part 124. Nothing in this Corrective Action Permit shall limit EPA's authority to undertake, or require any person to undertake, response action or corrective action under any law, including, but not limited to, Sections 104 and 106 of CERCLA, 42 U.S.C. §§ 9604 and 9606, and Section 7003 of RCRA, 42 U.S.C. § 6973. Nor shall any permit condition relieve the Permittee of any obligations under any law, including, but not limited to, Section 103 of CERCLA, 42 U.S.C. § 9603, to report releases of hazardous wastes, constituents, or substances to, at, or from the Facility.

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LIST OF ATTACHMENTS

The following Attachments are incorporated, in their entirety, by reference into this Permit. These incorporated attachments contain enforceable conditions of this Permit.

Attachment A: Final Decision and Response to Comments

Attachment B: MDE's Post-Closure Permit

PART I – STANDARD FACILITY CONDITIONS

A. PERMIT ACTIONS

This Corrective Action Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 C.F.R. §§ 270.41, 270.42 and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of MES, does not stay the applicability or enforceability of any permit condition (40 C.F.R. § 270.30(f)). Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicability regulations and laws.

B. STANDARD DUTIES AND REQUIREMENTS

1. Duty to Comply

a. MES shall comply with all conditions of this Corrective Action Permit and Post-Closure Permit attached hereto, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued under 40 C.F.R. § 270.61 or the analogous provisions of the State's authorized hazardous waste management regulations. Any other permit noncompliance constitutes a violation of RCRA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application (40 C.F.R. § 270.30(a)).

b. It shall not be a defense for MES in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Corrective Action Permit.

2. Duty to Provide Information

MES shall furnish, within the specified time, any relevant information which the EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this Corrective Action Permit. MES shall also furnish to EPA, upon request, copies of records required to be kept by this Corrective Action Permit (40 C.F.R. §§ 270.30(h) and 264.74(a)).

3. Biennial Report

Pursuant to 40 C.F.R. § 270.30(l)(9), MES shall submit a report to EPA and MDE by March 1 of every even-numbered calendar year covering Facility activities during the previous odd-numbered calendar year. The report shall contain the information required in 40 C.F.R. § 264.75.

4. Manifest Discrepancy Report

Pursuant to 40 C.F.R. § 270.30(1)(7), if a discrepancy in a manifest is discovered, MES must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days of the discovery, MES must submit a letter report, including a copy of the manifest, to EPA and MDE (40 C.F.R. §§ 264.72 and 270.30(1)(7)).

5. Unmanifested Waste Report

Pursuant to 40 C.F.R. § 270.30(1)(8), if MES receives unmanifested waste, MES must report such waste to EPA and MDE no later than fifteen (15) days after its receipt (40 C.F.R §§ 264.76 and 270.30(1)(8)).

C. APPROVAL OF SUBMISSIONS; INCORPORATION INTO PERMIT

All plans, reports, schedules, and other submissions required by the terms of this Corrective Action Permit are, upon approval by EPA, incorporated into this Corrective Action Permit. Any noncompliance with such approved schedules, plans, reports, or other submissions shall be deemed noncompliance with this Corrective Action Permit. In the event of unforeseen circumstances beyond the control of the MES which could not be overcome by due diligence, MES may request a change, subject to EPA approval, in the previously approved plans, reports, schedules or other submissions. This request may result in a modification of the Corrective Action Permit.

D. MODIFICATION, REVOCATION AND REISSUANCE

1. This Permit is based on information provided to EPA by the Permittee and MDE. Section 3005(c)(3) of RCRA provides EPA the authority to review and amend the Permit at any time. Any inaccuracies found in the information submitted by the Permittee may be grounds for the termination, modification or revocation and reissuance of this Permit (see 40 C.F.R. §§ 270.41, 270.42 and 270.43). The Permittee must inform EPA of any deviation from or changes in the submitted information that would affect the Permittee's ability to comply with the applicable statutes, regulations or permit conditions.

2. In the event that information becomes available to EPA identifying solid waste management units that require corrective measures, EPA will modify this Corrective Action Permit. This paragraph does not limit EPA's authority to otherwise modify this Corrective Action Permit in accordance with 40 C.F.R. Part 270, Subpart D.

E. TRANSFER OF PERMIT

This Corrective Action Permit is not transferable to any person, except after notice to EPA (40 C.F.R. § 270.30(l)(3)). This Corrective Action Permit may be transferred by MES to a new owner or operator only if the Corrective Action Permit has been modified or revoked and reissued under 40 C.F.R. § 270.40(b) or 270.42(b)(2) to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate Act (40 C.F.R. § 270.40).

F. PROPERTY RIGHTS

This Corrective Action Permit does not convey any property rights of any sort, or any exclusive privilege.

G. PERMIT EXPIRATION AND CONTINUANCE

1. Pursuant to 40 C.F.R. § 270.50, this Permit shall be effective for a fixed term not to exceed ten years. Pursuant to 40 C.F.R. § 270.51, this Permit and all conditions herein will remain in effect beyond the Permit's expiration date if the Permittee has submitted a timely and complete application for a new permit (see 40 C.F.R. §§ 270.10 and 270.13 - 270.29) and, through no fault of the Permittee, the Director has not issued a new permit under 40 C.F.R. § 124.15 on or before the expiration date of this permit. In addition, each permit for a land disposal facility shall be reviewed by the Regional Administrator five years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in 40 C.F.R. § 270.41 (40 C.F.R. § 270.50(d)).
2. If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must submit a complete application for a new permit at least 180 days before this Permit expires, unless permission for a later date has been granted by the Regional Administrator (40 C.F.R. §§ 270.10(h) and 270.30(b)).
3. The corrective action obligations contained in this Permit shall continue regardless of whether the Permittee continues to operate or ceases operation and closes the Facility. The Permittee is obligated to complete Facility-wide corrective action under the conditions of a RCRA permit regardless of the operational status of the Facility. The Permittee must submit an application for a new permit at least one hundred eighty (180) days before this Permit expires pursuant to 40 C.F.R. § 270.10(h), unless the Permit has been modified to terminate the corrective action schedule of compliance and the Permittee has been released from the requirements for financial assurance for corrective action.

H. DUTY TO SUBMIT CERTIFIED DOCUMENTS

All reports or other information submitted to EPA shall be signed and certified as required by 40 C.F.R. §§ 270.11 and 270.30(k).

PART II – SPECIFIC FACILITY CONDITIONS

A. CORRECTIVE ACTION FOR CONTINUING RELEASES; PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

1. Section 3004(u) of RCRA, 42 U.S.C. § 6924(u), and regulations codified at 40 C.F.R. §264.101, provide that all permits issued after November 8, 1984 must require corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit (SWMU), regardless of when waste was placed in the unit.
2. Under Section 3004(v) of RCRA, 42 U.S.C. § 6924(v), and 40 C.F.R. §264.101(c), EPA may require that corrective action at a permitted facility be taken beyond the facility boundary where necessary to protect human health and the environment, unless the owner or operator of the facility concerned demonstrates to the satisfaction of the EPA that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action.
3. Section 3005(c)(3) of RCRA, 42 U.S.C. § 6925(c)(3), and 40 C.F.R. § 270.32(b) provide that each Permit shall contain such terms and conditions as EPA determines necessary to protect human health and the environment.

B. REMEDY IMPLEMENTATION

1. Based on the Administrative Record, the final remedy for the Facility was developed and is described in the Final Decision and Response to Comments (FDRTC), set forth in Attachment A and made a part hereof. The requirements of this Permit provide for the implementation of the remedy described in the FDRTC.
2. The goal of the remedy for Facility-wide corrective action is to ensure the overall protection of human health and the environment. The final remedy for the Facility consists of the operation and maintenance activities and institutional controls required in the Post-Closure Permit provisions in Sections III and IV, and associated attachments to this Permit as set forth in Attachment B here to and made a part hereof.
3. Within ninety (90) days of the Effective Date of this Permit, the Permittee shall submit to the EPA a coordinate survey for applicable property use restrictions required by the Post-Closure Permit condition III.H as follows:

1. The boundary of each use restriction shall be defined as a polygon; and
2. The longitude and latitude of each polygon vertex as shall be established as follows:
 - a. Decimal degrees format;
 - b. At least seven decimal places;
 - c. Negative sign for west longitude; and
 - d. WGS 1984 datum.

C. EMERGENCY RESPONSE; RELEASE REPORTING

1. In the event Permittee identifies a newly discovered SWMU or new releases of hazardous waste and/or hazardous constituents at or from the Facility not previously identified, or discovers an immediate or potential threat to human health and/or the environment at the Facility, Permittee shall notify the EPA Project Coordinator orally within forty-eight (48) hours of discovery and notify EPA in writing within three (3) calendar days of such discovery summarizing the potential for the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and the immediacy and magnitude of the potential threat(s) to human health and/or the environment, as applicable. Upon written request of EPA, Permittee shall submit to EPA for approval an Interim Measures (IM) Workplan in accordance with the IM Scope of Work (see Permit Condition II.D) that identifies interim measures which will mitigate the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and mitigate any threat to human health and/or the environment. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize Permittee to act prior to EPA's receipt of the IM Workplan.

2. If EPA identifies a newly discovered SWMU or new releases of hazardous waste and/or hazardous constituents at or from the Facility not previously identified, or discovers an immediate or potential threat to human health and/or the environment at the Facility, EPA will notify Permittee in writing. Within ten (10) days of receiving EPA's written notification, Permittee shall submit to EPA for approval an IM Workplan in accordance with the IM Scope of Work, that identifies interim measures which will mitigate the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and mitigate any threat to human health and/or the environment. If EPA determines that immediate action is required, the EPA Project Coordinator may orally require Permittee to act prior to Permittee's receipt of EPA's written notification.

3. All IM Workplans shall ensure that the interim measures are designed to mitigate the migration or release of hazardous wastes, solid wastes and/or hazardous constituents at and/or from the Facility and mitigate any immediate or potential threat(s) to human health and/or the environment, and should be consistent with the objectives of, and contribute to the performance of the final remedy set forth in the FDRTC or any additional remedy which may be required at the Facility.

4. Each IM Workplan shall include the following sections as appropriate and approved by

EPA: Interim Measures Objectives, Public Involvement Plan, Data Collection Quality Assurance, Data Management, Waste Management Plan, Design Plans and Specifications, Operation and Maintenance, Project Schedule, Interim Measures Construction Quality Assurance, and Reporting Requirements.

5. Concurrent with submission of an IM Workplan, Permittee shall submit to EPA an IM Health and Safety Plan.

D. GUIDANCE DOCUMENTS

All work to be performed at the Facility pursuant to this Permit shall be in general accordance with applicable EPA RCRA corrective action guidance available at: http://www.epa.gov/reg3wcmd/ca/ca_resources.htm.

E. RECORDKEEPING

Upon completion of closure of any current or future SWMU, the Permittee shall maintain in the Facility operating record, documentation of the closure measures taken.

F. ACCESS FOR CORRECTIVE ACTION OVERSIGHT

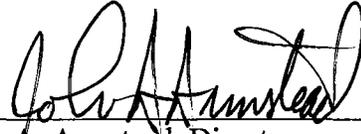
EPA and its authorized representatives shall have access to the Facility at all reasonable times for the purpose of monitoring compliance with the provisions of this Corrective Action Permit. MES shall use best efforts to obtain access to property beyond the boundaries of the Facility, if needed, for: (1) itself and any contractor of MES for the purpose complying with the provisions of this Corrective Action Permit and (2) EPA and its authorized representatives for the purpose of monitoring compliance with the provisions of this Corrective Action Permit.

G. EFFECTIVE DATE

This Corrective Action Permit is effective on May 13, 2013 and shall remain in effect until May 13, 2023 unless revoked and reissued, modified, or terminated in accordance with 40 C.F.R. §§ 270.41, 270.42 and 270.43 or continued in accordance with 40 C.F.R. § 270.51(a).

H. SIGNATURE

Date: 5.13.13

A handwritten signature in black ink, appearing to read "John A. Armstead", written over a horizontal line.

John A. Armstead, Director
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III

Attachment A



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

FINAL DECISION RESPONSE TO COMMENTS

MARYLAND ENVIRONMENTAL SERVICES
HAWKINS POINT HAZARDOUS
WASTE LANDFILL

BALTIMORE, MARYLAND

EPA ID NO. MD 000731356

Prepared by
Office of Remediation
Land and Chemicals Division
May, 2013

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List of Acronyms

COC	Contaminant of Concern
COMAR	Code of Maryland Regulations
COPR	Chrome-Ore Processing Residue
EI	Environmental Indicator
EPA	Environmental Protection Agency
GPRA	Government Performance and Results Act
IC	Institutional Control
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
MES	Maryland Environmental Services
MPA	Maryland Port Administration
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
SB	Statement of Basis
TCLP	Toxicity Characteristic Leaching Procedure and Characteristic Wastes
WWTP	Waste Water Treatment Plant

Section 1: Introduction

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC or Final Decision) in connection with the Maryland Environmental Services (MES) Hawkins Point Landfill Facility located at Baltimore, Maryland (Facility). The Final Decision is issued pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq.

On February 27, 2013, EPA issued a Statement of Basis (SB) in which EPA proposed a remedy for the Facility. Concurrent with issuing the SB, EPA issued a draft Corrective Action Permit. EPA held a joint forty-five (45)-day public comment period for the SB and draft Corrective Action Permit which began on February 27, 2013 and ended on April 12, 2013. The only comments EPA received during the public comment period were submitted by Maryland Department of the Environment (MDE).

EPA has determined that it is not necessary to make significant modifications to its proposed final remedy as set in the SB. Based on comments received during the public comment period EPA is, however, making minor modifications to the proposed final remedy as described in more detail in Attachment A, EPA Response to Comments which is included in the Final Decision. This Final Decision, the remedy selected herein, and permit incorporate those minor modifications and clarifications.

Section 2: Facility Background

2.1 Introduction

The Facility is located in the Curtis Bay Industrial Area at 5501 Quarantine Road, near the southern Baltimore City limits. The Facility is bordered by Thoms Cove to the east and industrial properties to the west including two closed landfills (SCM Glidden and BFI). Surrounding land is zoned primarily for heavy industrial use. Some limited undeveloped park land is located nearby; however, there are no residences within 1,000 feet of the Facility boundary. The Facility is owned by the Maryland Port Administration (MPA), has a total area of 67 acres, and is currently subject to a RCRA Permit issued by the Maryland Department of the Environment (MDE).

MPA obtained the 67-acre site in 1958 from the United States Government and developed it as a landfill for chrome-ore processing residue (hereafter COPR) from the former Allied Signal, Inc. Baltimore Works Plant. In 1979, MES began operating the Facility for the owner (MPA). MES is a not-for-profit public corporation that provides services to government and private sector clients and works on projects including water and wastewater treatment, solid waste management, composting, recycling, dredged material management, hazardous materials cleanup, and renewable energy. MES also provides engineering, monitoring and inspection services.

The landfill is divided into four areas: Areas 2, 3, 4, and 5. The landfill accepted hazardous wastes from 1975 until 1995. The MPA has leased Area 1 to Eastalco since 1968 and was never part of the landfill. An onsite wastewater treatment plant (WWTP) for leachate treatment ceased operation and was dismantled in 2000.

MDE issued a Post-Closure Permit, Permit Number: A-264 (MDE Permit or MDE Post-Closure Permit) to MES on October 15, 1995 for the purposes of requiring post-closure care and groundwater monitoring of the inactive MES land disposal facility (the Hawkins Point Hazardous Waste Landfill). The MDE Permit had an expiration date of 1998; however, the MDE Permit remained in effect until a renewal permit was issued by MDE to MES. MDE issued MES a Post-Closure Care Permit on January 28, 2002 (2002 MDE Permit). The 2002 MDE Permit would have expired on January 27, 2007, but was administratively extended until the permit was renewed. MDE issued a renewal of the post-closure permit for the Hawkins Point Hazardous Waste Landfill with an effective date of December 10, 2012.

2.2 Areas of Investigation

2.2.1 Areas 2 and 3

From 1975 to 1979, COPR materials were disposed of in three clay-lined cells located in Areas 2 and 3. These cells were closed in 1980. Areas 2 and 3 contain COPR

Statement of Basis

cells constructed by MPA that are managed by MES in post-closure care status as required by the MDE Permit and regulations. Leachate generated from Areas 2 and 3 is managed by a leachate collection system constructed in the late 1970s and rehabilitated in 2002. The collected leachate is conveyed to a leachate collection and storage system.

Since February 28, 1983, MES has performed groundwater monitoring using perimeter wells installed in Areas 2 and 3 and has managed overland surface water flow with a surface water collection swale. This non-impacted surface water is discharged to Thoms Cove.

2.2.2 Area 4

During construction of Area 5, two temporary leachate-holding lagoons were located in Area 4. These temporary lagoons were lined basins used for storing surface water collected during landfill construction. They were removed when landfill construction was completed in 1993. Area 4 has also been identified as a location where a "paint sludge" material had been observed, as reported in a June 27, 1985 Assessment of Continuing Releases Report by MES. This area pre-dates landfill closure, and there is no indication that the sludge remains on-site. Currently, Area 4 has no fill material and is a grass field.

2.2.3 Area 5

Area 5 was used for the disposal of COPR and demolition debris from the former Allied Signal, Inc.'s Baltimore Works Plant (Allied Signal Plant) (currently owned by Honeywell International, Inc.). Area 5 comprises 10 waste cells (numbered 1-3 and 5-11; there is no Cell 4) containing COPR and chromium-contaminated soil, trash, and construction debris from demolition of the former Allied Signal Plant. MES operated Area 5 while it was active, from approximately 1980 to 1994. In January 1983, MES began accepting COPR from the Allied Signal Plant. In 1985, the Allied Signal Plant closed. As part of that facility's closure, portions of the Allied Signal Plant were dismantled, yielding chromium-contaminated debris consisting of structural beams, concrete, brick, asbestos, soil (up until May 8, 1980), and other chromium-contaminated debris which was disposed of in Area 5 until 1993. An estimated 451,450 tons of COPR and demolition materials were disposed of in Area 5.

MES completed RCRA closure activities for Area 5 on May 20, 1994, and has since managed the closed landfill in post-closure care status. A condition of the MDE Post-Closure Permit is the performance of compliance monitoring of 6 wells conducted on a semi-annual basis for Area 5. Presently, the only waste handled from Area 5 is leachate from the landfill through the leachate collection system.

Statement of Basis

2.2.4 Leachate Containment Tank

Since 1999, MES has been RCRA permitted by MDE to store the landfill leachate in a 21,573-gallon aboveground tank, where all of the leachate collected at the Facility is combined, including leachate from Areas 2, 3, and 5. The leachate is conveyed via underground lines to an underground collection vault, from where it is then pumped into the 21,573-gallon aboveground storage tank. MES is RCRA permitted to store chromium-containing leachate in the aboveground storage tank. The leachate is transported offsite by a RCRA permitted hazardous waste transporter for treatment and disposal at EQ Pennsylvania, 730 Vogelsong Road, York, PA.

As required under Code of Maryland Regulations (COMAR) 26.13.05.10, the leachate collection and tank system is equipped with controls to prevent spills and overflows (e.g., level-sensing devices, high-level alarms, and automatic feed cutoff) and secondary containment. The tank is required to be inspected every operating day to detect visible corrosion or visible releases of leachate from the tank. As required under COMAR 26.13.05.10D, the tank has an inspection completed each odd-numbered year under the supervision of a licensed and registered Professional Engineer.

The leachate collected at the Facility is derived from water moving through COPR, which contains five main contaminants, namely, calcium, iron, aluminum, magnesium, and chromium. Four of these elements (aluminum, chromium, iron, and magnesium) originate from the raw chromite ore and the calcium originates from calcined lime that was added during processing and roasting of the ore. The landfill leachate is also classified as hazardous waste due to corrosivity and Toxicity Characteristic Leaching Procedure (TCLP) toxicity characterization for chromium.

2.2.5 Waste Water Treatment Unit

The on-site wastewater treatment plant (WWTP) ceased operation and was dismantled in 2000. MES uses the aboveground storage tank associated with the former WWTP for the collection of landfill leachate which is transported offsite for disposal at a RCRA permitted treatment and disposal facility. These leachate management practices will continue under the existing MDE Permit. Following cessation of the WWTP operation, the MDE National Pollutant Discharge Elimination (NPDES) Permit MD0061417 was terminated on January 28, 2004. The Facility currently operates under a General Discharge Permit MD3311 for Storm Water Associated with Industrial Activities, dated December 1, 2002, which addresses the discharge of non-impacted surface water runoff from the Facility. There are no documented spills or releases from the wastewater treatment unit area.

Section 3: Summary of Environmental Investigations

3.1 Environmental Investigations

Area	Description
Area 1	The Maryland Port Administration has leased Area 1 to Eastalco since 1968 and it was never part of the landfill.
Areas 2 and 3	Since 1983, MES has performed groundwater monitoring using perimeter wells installed in Areas 2 and 3 as part of the MDE Permit and will continue until the MDE Permit expires in ten years from December 10, 2012. EPA has determined that the covers, the leachate collection system, and institutional controls designed to maintain the landfill and limit future site activities in this Area, effectively eliminate potential future exposure pathways now and into the future. EPA has determined that no additional remedial activities are required.
Areas 4 and 5	Since 1995, MES has performed groundwater monitoring using perimeter wells installed in Areas 4 and 5 as part of the MDE Permit and will continue until the MDE Post-Closure Permit expires in ten years. There have been no documented violations of the MDE Permit. EPA has determined that the covers, the leachate collection system, and institutional controls designed to maintain the landfill and limit future site activities in this area significantly reduce potential future exposure pathways now and into the future. EPA has determined that no additional remedial activities are required.
Leachate Containment Tank	There are no documented spills or releases from the leachate tank area. EPA has determined that no remedial activities are required.
Wastewater Treatment Unit	There are no documented spills or releases from the wastewater treatment unit area. EPA has determined that no remedial activities are required.
Facility Groundwater	Groundwater from monitoring wells are monitored as part of the MDE Permit. Groundwater monitoring results showed no exceedances of Maximum Contaminant Levels (MCLs) promulgated at 40 C.F.R. Part 141 pursuant to Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1, for any of the contaminants, VOCs or chromium, on-site. Groundwater in Areas 2 and 3 have been monitored since 1983. Groundwater in Areas 4 and 5 have been monitored since 1995. Groundwater monitoring will be perpetual as long as the wastes remain in place.

Statement of Basis

Statement of Basis

Maryland Environmental Services Hawkins Point Hazardous Waste Landfill

May 2013

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3.2 Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. The Facility met these indicators on October 6, 2010. The environmental indicator determinations are available at <http://www.epa.gov/reg3wcmd/ca/md.htm>.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objective for the Facility is the containment of hazardous wastes and hazardous constituents that remain in place at the Facility and the control of human and environmental exposure to those hazardous wastes and hazardous constituents in a non-residential land use scenario.

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

1. Soils

EPA's Corrective Action Objective for the Facility is the control of exposure to the hazardous wastes and constituents remaining in the landfill by requiring the compliance with and maintenance of land use restrictions at the Facility and maintenance of the Facility's landfill caps.

2. Groundwater

EPA's Corrective Action Objectives for Facility groundwater is to control potential exposure to the hazardous wastes and constituents remaining in the landfill. While the contaminants in groundwater are not above levels appropriate for residential uses, because source material remains in place in the landfill, EPA is requiring the continued implementation of the groundwater monitoring program and leachate collection and treatment so that the Facility will be able to detect and remediate potential releases that may occur in the future.

Section 5: Final Remedy

The final remedy for the Facility consists of the maintenance of the Facility's landfill caps, the operation and maintenance of the Facility's leachate collection system, the continued implementation of a groundwater monitoring program required by the MDE Permit and the implementation and maintenance of land use restrictions.

Under EPA's final remedy, some concentrations of contaminants remain in the soils at the Facility above levels appropriate for residential uses. As a result, the final remedy will require land use restrictions to be implemented through enforceable institutional controls (ICs) in order to prevent human exposure to contaminants while such contaminants remain in place. ICs are generally non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of a remedy.

The ICs may be implemented through State of Maryland Well Construction Regulations, Article Title 9, Subtitle 13, Annotated Code of Maryland; COMAR, Title 26, Subtitle 4, Chapter 4, COMAR 26.04.04 (Regulations), local ordinances and local zoning requirements, and through site-specific institutional controls required by permit conditions. The ICs will restrict land use to non-residential uses.

The ICs shall contain the following land use restrictions:

1. The Facility property shall not be used for residential purposes unless it is demonstrated to MDE and EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and MDE and EPA provide prior written approval for such use;
2. The Facility shall not be used in any way that will adversely affect or interfere with the integrity and protectiveness of the landfill caps; the leachate collection and removal system, and groundwater monitoring wells unless it is demonstrated to MDE and EPA that such use will not pose a threat to human health or the environment, and MDE and EPA provide prior written approval for such disturbance.

EPA has determined that the above listed restrictions are contained in the MDE Post-Closure Permit and are enforceable thereunder. EPA's federal Permit modification requires MES to comply with the terms of its MDE Post-Closure Permit. In addition, pursuant to MDE regulations, MES has also placed a notice in the chain of title for the Facility and attached a survey of the areas where waste will remain in place. This requirement provides notice to any successor-in-interest of the existence of the landfill, in the event of a conveyance of an interest in the Facility property. MES has also placed a Deed Restriction (February 1983) on the title to the Facility property. According to the Deed Restriction, no construction can take place unless written approval is given by MDE.

Statement of Basis

Statement of Basis

Section 6: Evaluation of Final Remedy

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

Threshold Criteria	Evaluation
1) Protect human health and the environment	<p>EPA incorporated certain requirements of the Facility's MDE Post-Closure Permit in a modification to the CA Permit. The Post-Closure Permit requires the Facility to maintain a groundwater monitoring program, operate and maintain the leachate collection system, inspect and maintain the landfill caps, and implement land use controls (institutional controls) prohibiting the disturbance of the landfill caps and restricting other uses of the Facility property while wastes remain in place. Also a Deed Restriction on the Facility property requires written approval from MDE for any construction on such property.</p> <p>Monitoring data indicate there are no releases or significant groundwater impacts from the landfill. Furthermore, groundwater is not used as a potable water source within the Site boundary, no groundwater quality impacts are attributable to the Facility, and the site and surrounding areas are served by public water and sewer and Baltimore City does not allow groundwater for use as potable water.</p>
2) Achieve media cleanup objectives	<p>EPA's final remedy meets the cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). Groundwater monitoring confirms there are no significant impacts or releases to groundwater beneath the landfill. The landfill caps prevent human and environmental exposure to the hazardous wastes and hazardous constituents remaining in landfill.</p>
3) Remediating the	In its RCRA Corrective Action remedy decisions, EPA

Statement of Basis

Source of Releases	<p>seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment.</p> <p>EPA's final remedy meets the Remediating the Source of Releases criterion based on the following. The MDE Post-Closure Permit requires the landfill leachate to be collected and treated so it does not contaminate the groundwater. Groundwater monitoring and site inspections continue under the MDE Post-Closure Permit to detect any potential releases that may occur in the future so they can be remediated. The Facility and surrounding areas are served by public water and sewer and Baltimore City does not allow groundwater for use as potable water. The Facility is closed as a landfill and waste remains in place reducing the chances of a release of hazardous wastes from transportation.</p>
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Section 6: Evaluation of Final Remedy (continued)

Balancing Criteria	Evaluation
4) Long-term effectiveness	<p>The final remedy will maintain protection of human health and the environment over time by controlling exposure to the hazardous wastes remaining in soils. Groundwater is not used on the Facility for drinking water, and no downgradient users of off-site groundwater exist between the Facility boundary and the Thoms Cove. The Facility is closed as a landfill and waste remains in place. Therefore, the long term effectiveness of the remedy for the Facility will be assured by the continuation of the groundwater monitoring program, continued collection and treatment of the leachate, maintenance of the Facility's landfill caps and implementation of land use controls (institutional controls).</p>
5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	<p>The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has already been achieved, as demonstrated by the data from the groundwater monitoring which has not detected any contaminants from the landfill for 29 years. In addition, a groundwater monitoring program already in place will continue. Leachate from the landfill will be collected and treated. Maintenance of the Facility's landfill caps will also continue.</p>
6) Short-term effectiveness	<p>EPA's final decision does not involve any activities, such as construction or excavation, that would pose short-term risks to workers, residents, and the environment. In addition, EPA anticipates that the land use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments. The groundwater monitoring program and leachate collection and treatment are already in place and will continue.</p>
7) Implementability	<p>EPA's final decision is readily implementable. All of the engineering components of final remedy, namely, the groundwater monitoring, maintenance of the Facility's landfill caps and leachate collection and treatment, are already in place and operational. In addition, the Facility's Post-Closure Permit requires the Facility to inspect and to implement land use controls prohibiting the disturbance of the landfill caps and restricting other uses on the Facility property while wastes remain in place. Therefore, EPA does not anticipate any regulatory constraints in implementing its final remedy.</p>
8) Cost	<p>EPA's final decision is cost effective. The costs associated with this final remedy and the continuation of</p>

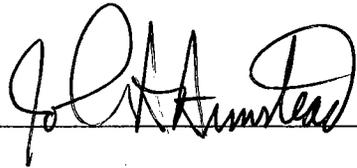
Statement of Basis

	groundwater monitoring have already been incurred and the remaining costs are minimal.
9) Community Acceptance	The only comments EPA received on the proposed remedy were from MDE as discussed directly below.
10) State/Support Agency Acceptance	EPA received comments from MDE. Based on MDE's comments, EPA has made minor modifications and has clarified certain aspects of the remedy as described in Attachment A, Public Comments and EPA responses.

Section 7: Declaration

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

Date: 5.13.13



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

Section 8: Index to Administrative Record

Controlled Hazardous Substances Permit Number A-264 from MDE for MES Hawkins Point Landfill, Effective Date: December 10, 2012 and Expiration Date: December 9, 2022

Final RCRA Corrective Action Site Visit Report for MES Hawkins Point Landfill, August 17, 2010

Deed Restriction for Hawkins Point Landfill between the Maryland Port Administration and Maryland Department of Health and Mental Hygiene, February 23, 1983

Third Quarter 2011 Groundwater Monitoring Report Hawkins Point Hazardous Waste Facility -- Permit A-264, November 10, 2011

Fourth Quarter 2011 Groundwater Monitoring Report Hawkins Point Hazardous Waste Facility -- Permit A-264, February 10, 2012

Revised Permit Application For Hazardous Waste Management Units At Hawkins Point Hazardous Waste Landfill Areas 2, 3, And 5, January 2012

MES October 26, 2010 letter to MDE, Apparent Statistically Significant Increase in Hexavalent and Total Chromium

Statement of Basis

Attachment A to
MES FDRTC

EPA Response to Comments

EPA only received comments from MDE on the SB and Draft Permit during the forty-five (45) day public comment period. In general, the comments from MDE were clarifying comments. Some comments related to MDE receiving copies of reports and correspondence. In addition, many of MDE's comments addressed grammatical changes. Also, one comment requested that EPA remove the financial assurance requirement as a state government owned facility is not required to have financial assurance according to the regulations (40 C.F.R. Section 264.140c). All of MDE's comments were addressed in the Permit and FDRTC except for the following comment:

MDE Comment

MDE commented that Attachment B is said to incorporate Sections II and III of the Maryland Post-Closure Permit. Section IV of the MDE Permit (Groundwater Detection Monitoring) should also be included.

EPA's Response

The Permit already incorporates Section IV of the MDE Permit in Part II, Section B.2.

Attachment B