STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI HAZARDOUS WASTE MANAGEMENT FACILITY
PART I PERMIT

PERMIT NUMBER: MOD030712822

PERMITTEE

Owner and Operator: Exide Technologies
Building 200
13000 Deerfield Parkway
Alpharetta, GA 30004

FACILITY LOCATION

Exide Technologies – Cannon Hollow Recycling Center
25102 Holt 250 Road
Forest City, MO 64451
Holt County
North Latitude – 40°01’50”
West Longitude – 95°14’00”

FACILITY DESCRIPTION

The Exide Technologies – Canon Hollow Recycling Center is a secondary lead smelting plant. The facility receives lead-acid batteries and other lead-bearing wastes, which are recycled to recover lead. This facility is located on approximately 360 acres in northwest Missouri as shown in Figure 1. All contiguous property owned by Exide Technologies is considered the facility property. The active portion of the facility comprises approximately 70 acres. The facility property boundaries are shown in Figure 2.

PERMITTED ACTIVITIES

This Permit allows the Exide Technologies – Canon Hollow Recycling Center to treat hazardous waste in a stabilization unit, store hazardous wastes in containers and containment buildings, dispose hazardous waste generated by Exide in an on-site landfill, and conduct post-closure care of a closed landfill. Exide utilizes an exempt blast furnace to recover lead (D008) from spent lead-acid batteries, other lead-bearing wastes generated both on and off site, and emission control dust generated by a secondary lead smelter (K069). Exide also utilizes a filter press to recover battery acid (D002) generated via the breaking of batteries.

This Permit also requires implementing additional corrective action activities, if needed, to address known releases to the environment from Solid Waste Management Units and Areas of Concern. This Permit also contains contingent corrective action conditions to address any newly identified releases to the environment from previously or newly identified Solid Waste Management Units and Areas of Concern, as necessary and appropriate.

EFFECTIVE DATES OF PERMIT: September 24, 2019 to September 23, 2029

September 20, 2019
Date

[Original signed by Carey Bridges]
Carey Bridges, R.G., Deputy Director
DIVISION OF ENVIRONMENTAL QUALITY

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INTRODUCTION

After public notice, according to Code of State Regulations 10 CSR 25-8.124, and review of Exide Technologies – Canon Hollow Recycling Center's *RCRA Hazardous Waste Permit Application* (hereafter referred to as the permit application), the Missouri Department of Natural Resources (hereafter referred to as the Department) determined the permit application conforms to the provisions of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), the Missouri Hazardous Waste Management Law [Missouri Revised Statutes Sections 260.350, RSMo, et seq.], and all standards, rules, and regulations adopted under these acts. The federal regulations, promulgated by the U.S. Environmental Protection Agency (hereafter referred to as EPA), are codified and to be codified in Title 40 of the Code of Federal Regulations. State Rules and regulations promulgated under the Missouri Hazardous Waste Management Law are published in the Code of State Regulations, Title 10, Division 25 (10 CSR 25).

Pursuant to Section 260.375.13, RSMo, and the Solid Waste Disposal Act, the Department hereby approves the permit application and issues this Missouri Hazardous Waste Management Facility Part I Permit (hereafter referred to as the Permit), Permit Number MOD030712822, to Exide Technologies, as the facility owner and operator (hereafter referred to as the Permittee), for operation of the hazardous waste management facility, post-closure care of a closed hazardous waste landfill, and "active" corrective action activities, including operating, maintaining, and monitoring an active hazardous waste landfill, as described in the permit application and this Permit. This Permit also includes "contingent" corrective action requirements that may be triggered, if necessary, for Solid Waste Management Units and Areas of Concern, pursuant to the state-equivalent requirements of the federal Hazardous and Solid Waste Amendments of 1984 (HSWA) to RCRA, as administered and enforced by the Department. The Department is issuing this Permit under state authority.

On July 6, 1999, Missouri received final authorization for revisions to its hazardous waste management program, including the corrective action portion of the HSWA Codification Rule (July 15, 1985, 50 FR 28702), which had been previously adopted by the state. Thus, the corrective action requirements implemented by Missouri, in lieu of EPA, are incorporated into this Permit and are under state authority.

All citations to federal regulations throughout this Permit are for the sake of convenient reference. The federal regulations are incorporated by reference in 10 CSR 25. Applicable regulations are found in 10 CSR 25-3, 25-4, 25-5, 25-6, 25-7, and 25-8; and 40 C.F.R. Parts 260 through 264, 266, 268, and 270, as specified in this Permit. In instances where state regulations are more stringent, the appropriate state reference is given and shall apply.

Any appeals of this Permit, or specific permit conditions based on state authority, shall be filed according to 10 CSR 25-8.124(2). Any parties adversely affected or aggrieved by this decision may be entitled to pursue an appeal before the Administrative Hearing Commission (AHC). To appeal, the party shall file a petition with the AHC within 30 calendar days after the date this Permit was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, then it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC can be found online at ahc.mo.gov, or by calling 573-751-2422. The Department also requests that a copy of any appeal request be provided to the Missouri Department of Natural Resources, Waste Management Program Director, P.O. Box 176, Jefferson City, MO 65102-0176.

The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

This Permit is for hazardous waste treatment, storage, disposal, post-closure, and "contingent" corrective action activities and is issued only to the Permittee named above. This Permit is issued for a period of 10 years and expires at midnight on September 23, 2029. This Permit is subject to review and modification by the Department, according to Section 260.395.12, RSMo, and 40 C.F.R. § 270.41. According to 40 C.F.R. § 270.51, if the Permittee submits a timely and complete application for a new permit and the Department, through no fault of the Permittee, is unable to issue a new permit on or before the expiration of this Permit, the conditions of this Permit will continue in force until the effective date or denial of a new permit.

All permit application information shall be made available to the public, unless the Permittee requests nondisclosure in writing, as described in Section 260.430, RSMo, and 10 CSR 25-7.270(2)(B)2. This Permit and accompanying materials shall be available for public review at the Department's office in Jefferson City, Missouri.

The following shall collectively be referred to as the "approved permit application":

- RCRA Hazardous Waste Permit Application, dated March 27, 2019.
- Additional technical information, dated May 24, 2019, and June 7, 2019.
- Sampling and Analysis Plan/Quality Assurance Project Plan, dated October 27, 2016.
- Battery Storage Building Interim Measures Report for removal of impacted soils, dated July 2, 2018, and approved by the Department on March 12, 2019.

- Class 1 Permit Modification Without Prior Director's Approval for Replacement of De Minimis Floor Leak Detection System, approved by the Department on March 14, 2019.

The "consolidated permit application" is defined as the approved permit application, any changes resulting from the public comment period, and all additional documents required to be submitted under the Schedule of Compliance contained in this Permit. The Permittee shall maintain a copy of all documents outlined above with the consolidated permit application at the facility.

Section 260.395.12, RSMo, and 40 C.F.R. § 270.32(b)(2) require each permit issued under that section contain terms and conditions as the Department determines necessary to protect human health and the environment. Operation of this hazardous waste management facility and any future required post-closure and corrective action activities shall be according to the provisions of this Permit; the Missouri Hazardous Waste Management Law and the rules and regulations promulgated thereunder as effective on the date of this Permit; all final engineering plans, petitions, specifications, and operating procedures submitted to the Department during the permit application review process, which are included in the approved permit application; and any other conditions, changes, or additions to the engineering plans, specifications, and operating procedures as specified in this Permit. The consolidated permit application, which includes the approved permit application, is therefore incorporated by this reference into the conditions of this Permit. All conditions specified in this Permit supersede any conflicting information in the consolidated permit application. Where conflicts arise between documents, the latest revision shall be effective.

40 C.F.R. §§ 261.4(a)(23) and 261.4(a)(24) codifies Hazardous Secondary Materials (HSM) exclusions. All units subject to the HSM exclusion must demonstrate exemption according to the requirements of this section. The following units are considered exempt from the regulated activities and financial mechanisms associated with this Permit as long as they continue to meet the exemption:

- The Filter Press is located in the Battery Recycling Building. The unit is fed by Dirty Acid Tank 1, and discharges to Clean Acid Tanks 1 and 2 (all are 90-day generator tanks). The oxide paste generated by the Filter Press is stored inside the De Minimis Liquids Storage Area Containment Building until it is fed to the Blast Furnace as feedstock.

- The Battery Breaker is located inside the De Minimis Liquids Storage Area Containment Building. Battery plates and other reclaimed lead components from the Battery Breaker are the major portion of several materials that comprise the Blast Furnace feedstock.

- The Battery Hammermill is located in the Battery Recycling Building. The unit mechanically sizes the battery boxes and tops, and the sized pieces are conveyed to the Hydraulic Separator.

- The Hydraulic Separator is located in the Battery Recycling Building. The unit sorts the metal lugs and any hard rubber case material from the plastic using two water-filled tanks connected in series with conveyers in the bottom.

- The Blast Furnace is located in the Smelting Casting Building. The unit is the main recovery unit where all feed stocks are sent for lead recovery.

All of the units associated with the HSM exemption and associated ancillary equipment shall continue to operate under negative pressure provided by the Permittee's air handling equipment.

According to 40 C.F.R. Part 270 Subpart D, any inaccuracies found in information submitted by the Permittee may be grounds for terminating, revoking and reissuing, or modifying this Permit, and for potential enforcement action. The Permittee shall inform the Department of any deviation from, or changes in, the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions. When the Department receives any information, such as inspection results, information from the Permittee, or requests from the Permittee, it may decide whether cause exists to modify, revoke and reissue, or terminate this Permit. All such changes to this Permit shall be handled according to the requirements of 10 CSR 25-8.124 and 40 C.F.R. Part 270 Subpart D.

40 C.F.R. § 264.101(a), requires all owners or operators of facilities seeking a permit for treating, storing, or disposing hazardous waste, to institute corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents from any Solid Waste Management Unit, regardless of the time at which waste was placed in such unit. 40 C.F.R. § 264.101(b) requires that permits issued under the Missouri Hazardous Waste Management Law contain a schedule of compliance for corrective action (where corrective action cannot be completed before permit issuance) and assurances of financial responsibility for completing such corrective action. 40 C.F.R. § 264.101(c) requires corrective action to be taken by the facility owner or operator beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. 40 C.F.R. § 264.101(c) further stipulates that the owner or operator is not relieved of any responsibility to cleanup a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases shall be determined on a case-by-case basis. In addition, assurances of financial responsibility for completing such corrective action shall be provided.

The Permittee is required to comply with all applicable environmental laws and regulations enforced by the Department. These environmental laws and regulations are administered by the Air Pollution Control Program, Environmental Remediation Program, Land Reclamation Program, Missouri Geological Survey, Waste Management Program, and Water Protection Program. Failure to comply with these environmental laws and regulations may, in certain circumstances, result in suspending or revoking this Permit and may subject the permit holder to civil and criminal liability.

DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in RCRA and 40 C.F.R. Parts 260, 261, 264, 266, 268, and 270, and 10 CSR 25, unless this Permit specifically provides otherwise. Where terms are not defined in RCRA, the regulations, this Permit, or EPA guidance or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

“Alternate Concentration Limit” means a Department-approved maximum concentration limit for a hazardous constituent, facility-related contaminant, or combination thereof, in the groundwater that will not pose an substantial present or potential hazard to human health or the environment, as long as that concentration limit is not exceeded.

“Approved Permit Application” means the original permit application and all subsequent revisions or addenda to the permit application, and any completeness and technical information submitted as referenced in the Introduction of this Permit.

“Area of Concern (AOC)” means any area where an actual or potential release of hazardous wastes or hazardous constituents that is not from a Solid Waste Management Unit, has occurred or is occurring and is determined by the Department to pose a current or potential threat to human health or the environment. Investigating and/or remediating AOCs may be required pursuant to Section 260.395, RSMo, and 40 C.F.R. § 270.32(b)(2).

“Consolidated Permit Application” means the approved permit application, any changes resulting from the public comment period, and all additional documents required to be submitted under the Schedule of Compliance contained in this Permit.

“Corrective Action” means the investigation and remediation of hazardous wastes and hazardous constituents from any past and present release(s), including contamination that may have migrated beyond the boundaries of the permitted property.

"Director" means the Director of the Missouri Department of Natural Resources or authorized delegate.

"Facility" means:

(1) All contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing hazardous waste; and

(2) All contiguous property under the control of the owner or operator, for the purpose of implementing corrective action under 40 C.F.R. § 264.101, and as specified in this Permit.

"Hazardous Constituent" means any chemical compound listed in 40 C.F.R. Part 261, Appendix VIII.

"Hazardous Remediation Waste" means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that are managed for implementing cleanup, as defined in 40 C.F.R. § 260.10.

"Hazardous Waste" means any waste, or combination of wastes, as defined by or listed in 10 CSR 25-4, incorporating 40 C.F.R. Part 261, that may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or that may pose a threat to the health of humans or other living organisms because of its quantity, concentration, physical, chemical, or infectious characteristics.

"Interim/Stabilization Measures (ISMs)" means actions to control or abate threats to human health or the environment from releases at hazardous waste treatment, storage, or disposal facilities, or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

"Land Disposal Restriction (LDR)" means the treatment standards established in the regulations found in 40 C.F.R. Part 268.

"Paved Roadway Surface" means a surface paved with asphalt, concrete, concrete pavers, brick, or other similar materials; but excluding gravel, crushed rock, slag, and other similar materials.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing hazardous wastes or hazardous constituents into the environment, outside of permitted primary or secondary containment. This includes

abandoning or discarding barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.

“Solid Waste Management Unit (SWMU)” means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for managing solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

“Toxicity Characteristic Leaching Procedure (TCLP)” means a sample extraction method for chemical analysis employed as an analytical method to simulate leaching through a landfill. The testing methodology is used to determine if a waste is characteristically hazardous, i.e., classified as one of the "D" listed wastes by EPA.

SCHEDULE OF COMPLIANCE

I. Within 60 calendar days after the effective date of this Permit, the Permittee shall:

A. Submit to the Department two paper copies and one searchable electronic copy of the consolidated permit application, incorporating any changes resulting from comments on the draft Permit, as required by 10 CSR 25-7.270(2)(B)7., and defined in the Introduction of this Permit.

B. Submit to the Department for approval, a revised Part A permit application, including all changes resulting from comments on the draft Permit, all units previously subject to resource recovery, all permitted units at the facility, and a diagram of the facility that clearly outlines where each unit is located.

C. Submit to the Department a certification by the Permittee that the Permittee has read this Permit in its entirety and understands all permit conditions contained in this Permit.

D. Submit to the Department, to the attention of the Waste Management Program, a check or money order payable to “State of Missouri” for any outstanding engineering review costs.

E. Submit to the Department, to the attention of the Waste Management Program, a check or money order payable to “State of Missouri” for $1,000 for each year this Permit is to be in effect beyond the first year. This Permit is effective for 10 years. Since the Permittee submitted a $1,000 deposit with the

permit application and paid a $1,000 permit continuation fee for the current year, the remaining balance to be submitted by the Permittee is calculated as:

$$\text{Remaining balance} = \$9{,}000.00 - \left(\left(\frac{\$1{,}000.00}{365\ days}\right) x N_d\right)$$

where N_d equals the number of calendar days from the expiration date of the continued permit (which coincides with the anniversary date of the original permit issuance) to the date of permit reissuance. An invoice based on the foregoing formula is included with this Permit.

F. Submit to the Department for approval, a final Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP) to reflect any additional requirements contained in this Permit, as required in Special Permit Condition IX.D.2.

G. Submit to the Department for review, draft updates to the financial assurance instruments to reflect the cost estimate in the approved permit application.

H. Submit to the Department for review, Contingency Procedures, as revised in the Integrated Events Response Plan.

II. Within 30 calendar days after receiving the Department's final written response regarding review of the updated closure cost estimate, dated March 27, 2019, the Permittee shall submit to the Department, all documentation necessary to demonstrate the Permittee satisfies the financial assurance criteria in 40 C.F.R. § 264.143.

III. Within 10 calendar days after receiving the Department's final written response regarding the draft financial assurance instrument(s), the Permittee shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding. The final financial assurance instrument(s) shall be in a form identical to the draft financial assurance documents reviewed by the Department, including any changes resulting from that review.

IV. Within 30 calendar days after receiving the Department's final written response regarding the draft financial assurance instrument(s), the Permittee shall ensure the issuing institution submits all original executed and/or otherwise finalized instruments or other documents to the Department. Facsimiles or photocopies are not acceptable.

V. The Permittee shall comply, as necessary, with all planned and contingent corrective action requirements of this Permit, as specified in the Corrective Action Conditions of this Permit and as summarized in Tables 5 and 6.

VI. Within 90 days prior to operating Phase III of Landfill 2, the Permittee shall submit to the Department, for review and approval, a plan for the handling and potential additional inspection requirements for landfilled material, per Special Permit Condition IV.

SUBMITTAL OF REQUIRED INFORMATION

I. Unless otherwise requested by the Department, the Permittee shall submit two paper copies and one searchable electronic copy of all reports, documents, plans/specifications, and consolidated permit application required under the terms of this Permit to:

Chief, Engineering Section
Missouri Department of Natural Resources
Waste Management Program
P.O. Box 176
Jefferson City, MO 65102-0176

II. If the Permittee requires additional time to submit a scheduled document or perform other activities required by this Permit, the Permittee shall submit a written extension request to the Department according to General Permit Condition V.

STANDARD PERMIT CONDITIONS

I. The Permittee shall comply with the requirements set forth in the Missouri Hazardous Waste Management Law and all corresponding standards, rules, and regulations adopted under this Law, Section 260.350, et seq., RSMo, 10 CSR 25-8, 40 C.F.R. Part 264 Subpart H, and 40 C.F.R. §§ 264.101, 270.10, 270.30, 270.40, 270.42, and 270.51.

II. According to 40 C.F.R. § 270.10(h)(1), the Permittee may submit a permit renewal application to the Department at least 180 calendar days before the expiration date of this Permit, unless the Director allows a later date. However, in order not to jeopardize timely reissuance, according to 40 C.F.R. § 270.32(b)(2), the Permittee shall submit a permit renewal application to the Department at least 24 months before the expiration date of this Permit, unless the Department allows a later date pursuant to General Permit Condition V.

GENERAL PERMIT CONDITIONS

I. The Permittee shall comply with the applicable requirements described in 40 C.F.R. Part 264 Subparts B, C, D, E, F, G, H, I, N, X, and DD; 40 C.F.R. Part 268; and 40 C.F.R. Part 270.

II. Notification of an Emergency Situation [Chapter 260.505.4, RSMo]

The Permittee shall, at the earliest practical moment upon discovery of an emergency involving the hazardous waste under the Permittee's control, implement the facility contingency plan, including notifying the Department's emergency response hotline at 573-634-2436 and the National Response Center at 800-424-8802.

Within 15 calendar days of the incident occurrence, the Permittee shall submit a written report to the Department providing details. The content of the written report shall conform to 40 C.F.R. § 264.56(i) and be provided to the addressee listed in "Submittal of Required Information" provision.

III. This Permit does not authorize managing any non-hazardous solid waste outside the hazardous waste management processes and units described herein. Handling non-hazardous solid waste or universal waste outside of the requirements of this Permit is subject to regulation under Missouri's Solid Waste Management Law and regulations.

IV. Review and Approval Procedures

A. Financial assurance cost estimates and draft financial assurance mechanisms submitted for closure, post-closure care, or corrective action activities shall be reviewed and responded to by the Department, according to the procedures described in the Financial Assurance Conditions of this Permit.

B. Following submission of any plan or report pertaining to sampling and analysis of hazardous waste, residues, emissions, plant sampling, odor testing, or closure or corrective action activities (excluding the Annual Groundwater Corrective Action Report, unless proposed actions to address corrective action program inadequacies are contained therein), the Department shall review and either approve or provide written comments on the plan or report. If the Department does not approve the plan or report, the Department shall notify the Permittee, in writing, of the deficiencies in the plan or report and specify a due date for submitting a revised plan, report, or associated activity schedule.

C. If the Department does not approve the revised plan, report, or associated activity schedule, the Department may modify the plan, report, or schedule and notify the Permittee of the modifications. The plan, report, or schedule, as modified by the Department, shall be the approved plan, report, or schedule.

D. If the Permittee disagrees with any Department-initiated plan, report, or schedule modifications, and a mutually acceptable resolution of such modifications cannot be informally reached, the Permittee may file an appeal of the Department-initiated modifications according to Sections 260.395.11 and 621.250, RSMo.

V. Document and Activity Extension Requests

A. If the Permittee requires additional time to submit a scheduled document or perform other activities required by this Permit, the Permittee shall submit a written extension request to the Department. Hard copy letter or e-mail are acceptable. The Department shall receive the extension request at least 15 calendar days before the scheduled document due date or activity completion date. The Permittee's extension request shall specify the amount of additional time needed and shall be accompanied by the Permittee's justification for the extension.

B. The Department shall review and approve the extension request according to the procedures described in General Permit Condition IV.

C. If the Department does not approve the extension request, the Department may modify the request and notify the Permittee of the modification. The extension request, as modified by the Department, shall be the approved schedule.

SPECIAL PERMIT CONDITIONS

The Department established the following permit conditions for the Permittee and the hazardous waste facility at the location specified in this Permit.

I. 100-Year Floodplain Requirements [40 C.F.R. § 264.18(b)]

The Permittee submitted information, as required in 40 C.F.R. §§ 270.14(b)(11)(iii) and 270.28, that identifies the active portion of the facility as not being located in a 100-year floodplain. The active portion of the facility, in this case, refers to all

contiguous land and structures, other appurtenances, and improvements on the land used for treating and storing hazardous waste. The Permittee shall maintain this information in the facility operating record.

II. Storage in Containers [40 C.F.R. Part 264 Subpart I]

Four container storage areas currently are permitted and operating: Container Storage-South Containment Building, Container Storage-Dock Entry Building, Spent Whole Battery Storage-Unloading Dock Staging/Storage Area, and Spent Whole Battery Storage – Trailer Parking Area. These areas are located as shown on Figure 2, and are subject to the requirements of 40 C.F.R. Part 264 Subpart I.

A. Waste Identification

The Permittee shall store, in the permitted container storage areas, only the hazardous wastes identified in Part A of the approved permit application. These hazardous wastes include lead-bearing materials to be processed through the smelter, as outlined in 40 C.F.R. Part 266; nickel cadmium and industrial batteries held for trans-shipping; containerized air pollution control scrubber sludge; and containerized wastewater sludge generated at the on-site treatment plant. Individual spent whole batteries are considered a container and shall be managed according to this Permit. Non-hazardous waste regulated material may be stored in the permitted container storage areas as long as the material does not interfere with hazardous waste operations, is containerized, and is managed according to the requirements of Special Permit Condition II. All stored wastes are subject to the terms of this Permit.

K069* Emissions control dust from secondary lead smelting.

*According to 40 C.F.R. § 261.32, K069's listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further action is taken.

B. Waste Quantities

The Permittee shall store only the following quantities of hazardous wastes, nickel cadmium and industrial batteries held for trans-shipping, non-regulated material, containerized air pollution control scrubber sludge, and containerized wastewater sludge generated at the on-site treatment plant in the permitted container storage areas, according to this Permit. The maximum

quantity of wastes that may be stored in each permitted container storage area is specified below and listed in Table 1:

Table 1 - Container Storage Area (CSA) Maximum Volumes

Identification	Maximum Volume (cubic yards)
Container Storage-South Containment Building	348
Container Storage-Dock Entry Building	500
Spent Whole Battery Storage-Unloading Dock Staging/Storage Area	334
Spent Whole Battery Storage – Trailer Parking Area	330 short tons*

* Volume capacity is not applicable because design capacity of area is limited by maximum tonnage capacity of 15 van trailers rather than volume.

1. Container Storage-South Containment Building

   The maximum quantity of wastes that may be stored in this unit at any time is 348 cubic yards of material. The Permittee shall not store materials that contain free liquids in this area, with the exception of spent whole batteries, as described in this Permit and the approved permit application.

2. Container Storage-Dock Entry Building

   The maximum quantity of wastes that may be stored in this unit at any time is 500 cubic yards of material. The Permittee shall not store materials that contain free liquids in this area, with the exception of spent whole batteries, as described in this Permit and the approved permit application.

3. Spent Whole Battery Storage-Unloading Dock Staging/Storage Area

   The maximum quantity of wastes that may be stored in this unit at any time is 334 cubic yards of material. The Permittee shall not store materials that contain free liquids in this area, with the exception of spent whole batteries, as described in this Permit and the approved permit application.

4. Spent Whole Battery Storage-Trailer Parking Area

The maximum quantity of wastes that may be stored at any time is 330 short tons or 15 trailers, whichever is less. For trailer counting purposes: a 53-foot trailer counts as one trailer, a 28-foot "Pup" trailer counts as one-half of a trailer, and a 28-foot "Box" truck counts as one-half of a trailer. The Permittee shall not store materials that contain free liquids in this area, with the exception of spent whole batteries, as described in this Permit and the approved permit application.

C. Condition of Containers [40 C.F.R. § 264.171]

1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste to a container that is in good condition or manage the hazardous waste in some other way that complies with the conditions of this Permit, such as over-packing.

2. During the entire on-site storage period, individual containers storing hazardous wastes shall be labeled and marked according to U.S. Department of Transportation (USDOT) guidelines regarding hazardous wastes and 49 C.F.R. Part 172. Spent whole batteries shall be labeled and marked as outlined in Special Permit Condition II.E.2. and II.E.3.

D. Compatibility of Waste with Containers [40 C.F.R. § 264.172]

1. The Permittee shall use a container made of, or lined with, materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

2. Only USDOT-approved containers shall be used for storing hazardous waste on site, except as otherwise noted in the approved permit application.

E. Management of Containers [40 C.F.R. § 264.173]

1. A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste. A container holding hazardous waste shall not be opened, handled, or stored in a manner that may rupture the container or cause it to leak or spill.

2. The Permittee shall store containers in a manner that ensures physical stability and allows for visual inspection of each container and each container's label, except:

   a. For visual inspection of containers not containing free liquids where container size prohibits inspecting center containers when palletized, provided the outermost containers are clearly labeled as to the total amounts, codes, and names of hazardous waste on the pallet; and

   b. For visual inspection of containers containing free liquids where container size prohibits inspecting center containers when palletized provided:

      (1) The hazardous wastes within a pallet are all the same material;

      (2) If a container on the pallet leaks, the pallet is unloaded and the spill is remedied according to the approved permit application; and

      (3) The outermost containers are clearly labeled as to the total amounts, codes, and name of hazardous waste on the pallet.

3. Containers shall not be stacked in a manner that causes leaks or spills of hazardous waste.

   a. Drummed material shall be stacked no higher than two vertically-oriented 55-gallon sized drums.

b. Containers stacked on pallets shall be stacked no higher than 8 feet. The containers shall be shrink-wrapped in plastic to stabilize the palletized stacks.

4. All containers shall be arranged so there is a minimum of 4 feet of aisle space maintained between rows, allowing accessibility to each individual container for inspection. Double pallet rows can be used. When containers are stored on pallets, a minimum of one-half foot of spacing shall be maintained between the pallets within the row. All container labels shall be visible from an aisle.

5. The aisle space between rows shall be maintained to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation.

6. Palletized spent whole batteries shall be managed according to the following:

   a. In rows, two pallets in width, and stacked no higher than 8 feet. The batteries shall be shrink-wrapped in plastic to stabilize the palletized stacks.

   b. The pallet stacking configuration shall in no way compromise the structural integrity of the stack, individual pallets, or individual batteries.

   c. The palletized stacks shall be clearly labeled as to the type of containers or batteries on the pallet, according to USDOT guidelines.

   d. The aisle space between rows of palletized batteries shall be maintained to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation.

7. Individual spent whole batteries shall be managed according to the following:

a. The Permittee shall store spent whole batteries in a manner that ensures physical stability and allows for visual inspection of each battery.

b. Spent whole batteries shall not be handled or stored in a manner that may cause them to rupture, leak, or spill.

c. Individual spent whole batteries identified as without a battery cap and containing liquids shall be capped or managed as if they are not in good condition. This does not apply to dry batteries containing no acid that do not have a cap.

d. Individual spent whole batteries shall be labeled according to applicable USDOT regulations.

e. Individual spent whole batteries shall be stored in an organized manner to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation.

8. The container storage areas shall be clearly delineated with tape or painted lines on the floor of the facility. Rows within the container storage areas shall also be delineated with tape or painted lines on the floor of the facility.

F. Inspections [40 C.F.R. § 264.174]

1. At least weekly, and according to the schedules provided in Attachment A-7 of the approved permit application, the Permittee shall inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

2. At least weekly, the Permittee shall inspect the floor around the containers looking for cracks. At least annually, the Permittee shall inspect the entire floor for cracks, including the areas under the containers. The annual inspection requirement may be met by partial inspections of the floor during movement of containers in and out of the container storage areas. If cracks are found in the floor, repairs shall begin within 10 calendar days of identifying the cracks.

Inspection results and any repairs shall be recorded in the facility operating record.

3. The Spent Battery Trailer Parking Area shall be inspected daily, during periods of operation, according to Attachment A-7 of the approved permit application. The inspection shall include looking for leakage from the trailers and accumulation of liquid under the trailers. Any indication of leakage shall be properly managed and the affected trailer shall be unloaded immediately.

G. Containment [40 C.F.R. § 264.175]

1. The Permittee shall design and operate containment systems for the Container Storage – South Containment Building, Container Storage-Dock Entry Building, and Spent Whole Battery Storage-Unloading Dock Staging/Storage Area, as follows:

a. A base shall underlie the containers, which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

b. The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

c. The containment system shall have sufficient capacity to contain 10 percent of the volume of the maximum volume of all containers permitted for the area or 100 percent of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.

d. Run-on into the containment system shall be prevented unless the collection system has sufficient excess capacity in addition to that required in Special Permit Condition II.G.1.c., to contain any run-on that might enter the system.

e. Spilled or leaked waste shall be removed from the sump or collection area, and the area shall be cleaned up, in as timely a manner as is necessary to prevent releases to the environment and protect on-site personnel.

2. The Permittee shall design and operate containment systems for the Spent Whole Battery Parking Area as follows:

a. The area may be used as general parking for incoming trailers of non-regulated material, outgoing trailers awaiting departure from the plant, and other general plant operational parking needs.

b. The Permittee shall keep a record of all incoming and outgoing shipments on file at the facility.

c. Inspections and remedial actions for the trailers containing hazardous waste shall in no way be impeded by the use of the area for reasons other than permitted storage.

d. The trailers containing hazardous waste shall remain latched and sealed unless the trailer is being inspected or unloaded for recycling or storage within another permitted container storage area.

e. Run-on onto the parking lot shall be collected or diverted into the storm water basin for collection and transfer to the facility's wastewater treatment plant, according to the Missouri State Operating Permit.

f. All trailers containing hazardous waste shall remain on a surface that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

H. Temporary Management [40 C.F.R. § 270.32(b)(2)]

A container holding hazardous waste shall not be placed in an area of the facility not addressed by this Permit, unless the waste is a facility generated

waste being accumulated in a less than 90-day hazardous waste generator storage area. For purposes of loading, off-loading and staging, waste may only be stored for a period that does not exceed 24 consecutive hours in areas of the facility designated for this purpose that are not addressed by this Permit.

I. Special Requirements for Incompatible Waste [40 C.F.R. § 264.177]

1. The Permittee shall not place incompatible hazardous wastes or materials in the same container, unless such action complies with the requirements of 40 C.F.R. § 264.17(b).

2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

3. The Permittee shall separate, by device (i.e., a dike or other physical means), containers of incompatible waste or materials. No incompatible waste or materials may be stored together in the container storage areas without providing separation sufficient to prevent the mixing of any spilled materials that may be incompatible.

J. Closure [40 C.F.R. Part 264 Subpart G]

At closure, the Permittee shall remove all solid and hazardous waste and hazardous waste residues from the container storage areas and containment systems and close according to the Closure Plan included in Appendix I of the approved permit application. If the Permittee is unable to close according to the approved Closure Plan, the Permittee shall submit a permit modification to the Department, according to 40 C.F.R. § 270.42., addressing any necessary changes to the approved Closure Plan.

III. <u>Storage in Containment Buildings [40 C.F.R. Part 264 Subpart DD]</u>

Eight containment buildings currently are permitted and operating: Mix Room, Storage Area for Battery Plates with De Minimis Liquids, 80' x 80' Storage Area, South Containment Building, Dock Entry Building, Miscellaneous Storage Area, Stabilization/Staging & Storage Area, and Charge Floor Area. These areas are located as shown on Figure 2, and are subject to the requirements of 40 C.F.R. Part 264 Subpart DD.

A. Waste Identification

The Permittee shall store, in the permitted areas of the containment buildings, only the hazardous wastes identified in the Hazardous Waste Permit Information Form of the approved permit application. These hazardous wastes include lead bearing materials to be processed through the smelter, as outlined in 40 C.F.R. Part 266; containerized air pollution control scrubber sludge; and containerized wastewater sludge generated at the on-site treatment plant. Non-hazardous waste regulated material may be stored in the permitted containment buildings as long as the material does not interfere with hazardous waste operations and is managed according to the requirements of Special Permit Condition III. All stored wastes are subject to the terms of this Permit.

K069* Emissions control dust from secondary lead smelting.

*According to 40 C.F.R. § 261.32, K069's listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further action is taken.

B. Waste Quantities

The Permittee shall store only the following quantities of hazardous wastes: nickel cadmium batteries held for trans-shipping, industrial batteries held for trans-shipping, non-regulated material, containerized air pollution control scrubber sludge, and containerized wastewater sludge generated at the on-site treatment plant in containment storage areas according to this Permit. The maximum quantity of wastes and non-regulated material that may be stored in each permitted containment building is specified below and listed in Table 2:

Table 2 - Containment Building Maximum Capacities

Identification	Maximum Storage Capacity (cubic yards)
Mix Room	535
De Minimis Liquids Storage Area	1,121
80-foot x 80-foot Storage Area	2,294
South Containment Building	1,588*
Dock Entry Building	1,328**
Miscellaneous Storage Area	155
Stabilization/Staging & Storage Area	1,179
Charge Floor Area	4

1. Mix Room

   The maximum quantity of wastes that may be stored in this unit at any time is 535 cubic yards of material. The Permittee shall not store materials that contain free liquids in this area, as described in this Permit and the approved permit application.

2. De Minimis Liquid Storage Area/Battery Breaking Area

   The maximum quantity of wastes that may be stored in this unit at any time is 1,121 cubic yards of material. The Permittee shall meet free-liquid containment building requirements, as specified in 40 C.F.R. Part 264 Subpart DD.

3. 80-foot x 80-foot Storage Area

   The maximum quantity of wastes that may be stored in this unit at any time is 2,294 cubic yards of material. The Permittee shall not store materials that contain free liquids in this area, as described in this Permit and the approved permit application.

4. *South Containment Building

   The maximum quantity of wastes that may be stored in this unit at any time is 1,588 cubic yards of material. This area may be used to store up to 342 cubic yards of containers, which will reduce the equivalent amount of stored material. The Permittee shall not store materials that contain free liquids in this area, as described in this Permit and the approved permit application.

5. **Dock Entry Building

   The maximum quantity of wastes that may be stored in this unit at any time is 1,328 cubic yards of material. This area may be used to store up to 500 cubic yards of containers, which will reduce the equivalent amount of stored material. The Permittee shall not store any wastes that contain free liquids in this area, as described in this Permit and the approved permit application.

6. Miscellaneous Storage Area

   The maximum quantity of wastes that may be stored in this unit at any time is 155 cubic yards of material. The Permittee shall not store any wastes that contain free liquids in this area, as described in this Permit and the approved permit application.

7. Stabilization/Staging & Storage Area

   The maximum quantity of wastes that may be stored in this unit at any time is 1,179 cubic yards of material. The Permittee shall not store any materials that contain free liquids in this area, as described in this Permit and the approved permit application.

8. Charge Floor Area

   The maximum quantity of wastes that may be stored in this unit at any time is 4 cubic yards of material. The Permittee shall not store any wastes that contain free liquids in this area, as described in this Permit and the approved permit application.

C. Design and Operating Standards [40 C.F.R. § 264.1101]

1. The containment buildings shall be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g. precipitation, wind, run-on) and to ensure containment of the maximum permitted quantity of managed waste.

2. The floors and containment walls of the buildings shall be constructed of materials of sufficient strength and thickness to support themselves, the maximum permitted quantity of managed waste, and any personnel and heavy equipment that operate within the building.

3. All surfaces shall be chemically compatible with the materials and waste to be managed in the containment buildings.

4. The containment buildings shall have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment during the operating life of the building.

5. All containment buildings, except the De Minimis Liquid Storage Area/Battery Breaking Area, shall be used to manage only wastes containing no free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means).

6. For the De Minimis Liquid Storage Area/Battery Breaking Area, which may be used to manage wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the Permittee shall maintain:

   a. A primary barrier to prevent the migration of hazardous constituents into this barrier;

   b. A liquid collection and removal system to minimize and collect accumulating liquid on the primary barrier of the containment building;

   c. A secondary containment system, including a secondary barrier, to prevent migration of hazardous constituents into this barrier; and

d. A leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time. If leaks are detected, the Permittee shall comply with Special Permit Condition III.C.8., for repair and notification requirements. The leak detection system shall be maintained according to the following minimum requirements:

(1) Constructed with a bottom slope of 1 percent or more;

(2) Constructed of a granular drainage material with a hydraulic conductivity no less than $1x10^{-2}$ cm/sec and a thickness of no less than 30.5 cm, or constructed of synthetic or geonet drainage materials with a transmissivity no less than $3x10^{-5}$ m^2/sec; and

(3) Constructed with a liquid collection system of sufficient capacity to contain all liquid that may reach the reservoirs until such time the leak is detected and the liquid is removed.

7. The Permittee shall use controls and practices to ensure containment of the hazardous wastes within the buildings and, at a minimum:

a. Maintain the primary barrier free of cracks, gaps, corrosion, or other deterioration that could cause hazardous wastes to be released from the primary barrier;

b. Maintain the level of the stored/treated hazardous waste within the containment walls of the building so that material is not stored above the height of the wall of the containment system at the wall, and so that if a material pile within the system collapses it will not cause a release of hazardous waste over the top of the containment system;

c. Prevent tracking hazardous waste out of the buildings by operating decontamination stations at the heavy equipment exit of each containment building and decontaminating all waste/material-handling vehicles before they exit a containment building. No waste/material-handling vehicle shall

exit any containment building without being decontaminated, except during periods of freezing temperatures and/or weather conditions conducive to ice formation on travel surfaces. All rinsate shall be collected and properly managed. During periods of freezing temperatures and/or weather conditions conducive to ice formation on travel surfaces, and during any period the decontamination station is inoperable, hazardous wastes visible on any waste/material-handling vehicle shall be physically removed over the decontamination station before they exit; and

d. Take measures to control fugitive dust emissions such that any opening (doors, windows, vents, cracks, etc.) exhibits no visible emissions, including when vehicles and personnel are entering and exiting the building.

8. If the Permittee detects a condition that could lead to or has caused a release of hazardous wastes or hazardous constituents, the Permittee shall promptly repair the condition, according to the following procedures:

a. Enter a record of the discovery in the facility operating record;

b. Immediately remove from service the portion of the containment building affected by the condition;

c. Determine what steps will be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

d. Notify the Department of the condition within seven calendar days after the discovery of the condition. Within 14 working days, provide a written notice to the Department, describing the steps taken to repair the containment building and a plan, including a schedule, for accomplishing the work not completed at the time of the written notice.

The Department shall review the information submitted, make a determination regarding whether the containment building shall be

removed from service completely or partially until repairs and cleanup are complete, and notify the Permittee, in writing, of the determination and the underlying rationale.

Upon completing all repairs and cleanup, the Permittee shall notify the Department, in writing, and provide a verification, signed by a professional engineer registered in Missouri, that the repairs and cleanup have been completed according to the written plan submitted according to Special Permit Condition III.C.8.d.

D. Inspections [40 C.F.R. § 264.15]

1. At least weekly, the Permittee shall inspect all containment building areas and area immediately surrounding the containment buildings for the purposes of detecting any signs of releases of hazardous waste or hazardous constituents.

2. The De Minimis Liquid Storage Area/Battery Breaking Area containment building and liquid collection and leak detection systems, including the collection reservoirs, shall be inspected daily during periods of battery breaking operation and when waste is present, or at least weekly during periods of no battery breaking activity. The Permittee shall inspect the containment building and liquid collection and leak detection systems, including the collection reservoirs.

3. At least weekly, the Permittee shall inspect the readily visible area of all containment building floors for cracks. At least annually, the Permittee shall inspect the entire floor of all containment buildings for cracks, including areas under stored wastes and equipment. The annual inspection requirement may be met by partial inspections of the floor during movement of material in and out of the storage areas. Floor areas under permanently mounted equipment are exempt from this requirement. If cracks are found in the floor, repairs shall begin within 10 calendar days of identifying the cracks. Inspection results and any repairs shall be recorded in the facility operating record.

E. Closure [40 C.F.R. § 264.1102]

At closure, the Permittee shall remove all solid and hazardous wastes and hazardous waste residues from the containment buildings and containment

systems and close according to the Closure Plan included in Appendix I of the approved permit application. If the Permittee is unable to close according to the approved Closure Plan, the Permittee shall submit a permit modification to the Department, according to 40 C.F.R. §§ 264.112(c) and 270.42, addressing any necessary changes to the approved Closure Plan.

IV. Miscellaneous Treatment Units [40 C.F.R. Part 264 Subpart X]

One miscellaneous treatment unit currently is permitted and operating: Stabilization Unit. The unit is located as shown on Figure 2, and is subject to the standards for miscellaneous physical and chemical treatment units in 40 C.F.R. Part 264 Subpart X.

The term "miscellaneous unit" is used to describe the treatment device located in the Stabilization/Staging & Storage Area containment building. The Stabilization Unit is used to mix hazardous slag waste with materials that render the slag non-hazardous and is then able to pass Land Disposal Restrictions, as outlined in 40 C.F.R. Part 268 Subpart D.

A. Waste Identification [40 C.F.R. § 264.601]

The Permittee may treat only the hazardous wastes identified in Part A of the approved permit application, subject to the terms of this Permit. All miscellaneous treatment processes performed according to this Permit shall be subject to the terms of 40 C.F.R. Part 264 Subparts DD and I, and shall only be performed within the areas identified in Special Permit Condition IV.

K069* Emissions control dust from secondary lead smelting.

*According to 40 C.F.R. § 261.32, K069's listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further action is taken.

B. Waste Quantities [40 C.F.R. § 264.601]

1. At any given time, the Permittee may only treat a total volume of 12.5 tons per hour of hazardous waste in the Stabilization Unit.

2. The Permittee shall only store the amount of hazardous waste in the Stabilization/Staging & Storage Area as identified in Special Permit Condition III.B.7.

C. Control of Fugitive Emissions

The Permittee shall operate, inspect, and maintain all systems and equipment necessary to prevent fugitive emissions from the Stabilization/Staging & Storage Area.

D. Containment [40 C.F.R. §§ 264.175 and 264.601]

The Permittee shall design and operate containment systems for the treatment areas as follows:

1. A base shall underlie the containers, which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.

2. The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

3. The containment system shall have sufficient capacity to contain 10 percent of the volume of the maximum volume of all containers permitted for the area or 100 percent of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.

4. Run-on into the containment system shall be prevented unless the collection system has sufficient excess capacity in addition to that required in Special Permit Condition IV.D.3., to contain any run-on that might enter the system.

5. Spilled or leaked waste shall be removed from the sump or collection area, and the area shall be cleaned up, in as timely a manner as is necessary to prevent releases to the environment and provide protection of on-site personnel.

E. Operating Requirements [40 C.F.R. § 264.601]

1. The Permittee shall not place hazardous waste or treatment reagents in the treatment unit if they could cause any component of that treatment unit to rupture, leak, or otherwise fail.

2. The Permittee shall ensure proper operation and maintenance of all automatic equipment that prevents spills and overflows from a treatment device or containment system.

3. The Permittee shall use only the mechanical treatment device specified in the approved permit application for treating hazardous waste.

4. The Permittee shall operate the miscellaneous treatment unit only according to the manufacturer's applicable operating manuals and as described in Appendix E of the approved permit application.

5. At all times the Stabilization Unit is operating, the air emissions control equipment shall be operating and fully functional.

F. Monitoring Requirements

The Permittee shall maintain, calibrate, and operate continuous monitors which monitor and record the operating parameters and conditions used to verify compliance with limits and operating parameters specified in this Permit, including any parameters used in calculations.

G. Response to Leaks or Spills [40 C.F.R. §§ 264.601 and 264.196]

1. In the event of a leak or a spill from the treatment system, or from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall remove the system from service immediately and complete the following actions:

a. Stop the flow of hazardous waste into the system, remove existing waste, and inspect the system to determine the cause of the release.

b. Remove waste from the system within 24 hours of detecting the leak to prevent further release and to allow inspection and

repair of the system. If the Permittee finds that it will be impossible or impractical to meet this time period, the Permittee shall notify the Department and demonstrate why a longer time period is required, according to General Permit Condition V.

If the collected material is a hazardous waste, it must be managed according to all applicable requirements of 40 C.F.R. Parts 262, 263, 264, 266, and 270. The Permittee shall note that if the collected material is discharged through a point source to public waters or to a publicly owned treatment works, it is subject to requirements to the Clean Water Act.

c. The Permittee shall immediately conduct a visual inspection of all releases to the environment and, based on that inspection:

(1) Prevent further migration of the leak or spill to soils, surface water, or groundwater;

(2) Remove and properly dispose any visible contamination of the soil or surface water; and

(3) Determine the extent of contamination to the soil, surface water, or groundwater.

2. In the event of equipment failure:

a. For a release caused by a spill that has not damaged the integrity of the treatment system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system, before returning the treatment system to service.

b. For a release caused by a leak from a treatment unit to the secondary containment system, the Permittee shall repair the treatment unit before returning it to service. The material released shall be thoroughly removed from the affected area.

c. If the Permittee replaces a component of the treatment system to eliminate the leak, that component must satisfy the

requirements for new tank systems or components required by 40 C.F.R. §§ 264.192 and 264.193.

3. For all major repairs to eliminate leaks or restore the integrity of the treatment system, the Permittee shall obtain a certification by a qualified professional engineer registered in Missouri, before returning the system to service. The certification must state the repaired system is capable of handling hazardous wastes permitted for treatment within the unit without release for the intended life of the system.

H. Inspection Schedules and Procedures [40 C.F.R. § 264.602]

1. The Permittee shall inspect the treatment system according to the Inspection Schedule in Attachment A-7 of the approved permit application.

2. The Permittee shall inspect once each operating day:

a. All visible portions of each unit to detect corrosion, fugitive emissions, or releases of waste or treatment residues;

b. Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges) to ensure the unit is being operated according to its design and this Permit; and

c. Floors for any residual waste material that has not been removed.

3. The Permittee shall visually inspect equipment used to manage liquids daily for leaks, spills, or other releases of hazardous waste.

4. The Permittee shall document compliance with Special Permit Condition IV.H.2., and record and maintain the information in the facility operating record.

I. Recordkeeping and Reporting [40 C.F.R. § 264.602]

1. The Permittee shall keep a record of all incoming and outgoing shipments of hazardous waste on file at the facility.

2. The Permittee shall report to the Department, within 24 hours of detection, when a leak or spill occurs from the treatment system or secondary containment system to the environment, except for:

    a. A leak or spill of 1 pound or less of hazardous waste, that is immediately contained and cleaned up at the time of release, or within one shift change at the facility; and

    b. Releases contained within a secondary containment system and cleaned up within 24 hours of release.

3. Within 15 calendar days of detecting a release to the environment from the treatment system or secondary containment system, the Permittee shall report the following information to the Department:

    a. Likely route of migration of the release;

    b. Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be unable to meet this time period, the Permittee shall provide the Department with a schedule of when the results will be available. This schedule must be provided before the required 15-day submittal period expires;

    c. Proximity of down-gradient drinking water, surface water, and populated areas;

    d. Description of response actions taken or planned; and

    e. Description of countermeasures needed to preclude migration to or in any and all media, including, but not limited to, information specified in all provisions of 40 C.F.R. §§ 264.601(a), (b), or (c), as deemed appropriate by the Department.

4. Within seven calendar days of the unit being returned to use, the Permittee shall submit to the Department, all certifications of major repairs to correct leaks, which shall be consistent with the specifications found in the approved permit application.

J. Testing

1. Within 60 calendar days from the date of a request from the Department, the Permittee shall submit a test plan to the Department, in order to conduct sampling and analysis of the hazardous waste, residues, and emissions produced by the Stabilization Unit. The Department may request a new or revised plan for conducting such testing. The Department shall review and approve any test plan before its implementation, according to the procedures described in General Permit Condition IV.

2. The Permittee shall provide written notice of testing to the Department at least 30 calendar days before its initiation. The testing shall be completed within 30 calendar days of its initiation and the results reported to the Department within 90 calendar days of its conclusion.

K. Closure [40 C.F.R. § 264.601 and 40 C.F.R. Part 264 Subparts G and H]

At closure of a miscellaneous unit, the Permittee shall remove or decontaminate all hazardous waste and hazardous waste residues from the miscellaneous unit, including, but not limited to: contaminated tank system components (liners, etc.), contaminated soils, contaminated equipment and structures, and close according to the Closure Plan in Appendix I of the approved permit application. If the Permittee is unable to close according to the Closure Plan, the Permittee shall submit a permit modification to the Department, according to 40 C.F.R. §§ 264.112(c) and 270.42. The Closure Plan, closure activities, closure cost estimates, and financial responsibility for the miscellaneous unit shall meet all requirements specified in 40 C.F.R. Part 264 Subparts G and H.

V. Waste Minimization [40 C.F.R. § 264.73(b)(9)]

Pursuant to 40 C.F.R. § 264.73(b)(9), the facility operating record shall contain a certification by the Permittee, made no less often than annually, that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste the Permittee generates, to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes any present and future threats to human health and the environment.

VI. Landfill 2 [40 C.F.R. Part 264 Subpart N]

Landfill 2 is permitted to receive material meeting all requirements of Special Permit Condition VI., as outlined below. The current boundary of the landfill and the planned boundary after expansion and closure of the landfill is shown on Figure 5 and in Section F of the approved permit application. Landfill 2 began operating in 1991 and is designed for phased construction and use, with an overall design capacity of 754,000 cubic yards. Phase I has been constructed and completed. Phase II has been constructed and is currently operating.

Prior to operating Phase III of the landfill, the Permittee shall submit to the Department, for review and approval, a plan for the proper placement and potential increased inspections of landfilled material in order to safely maintain the designed 5H:1V side slopes of Landfill 2.

A. Waste Identification

The Permittee shall dispose in Landfill 2, only the wastes identified in the Hazardous Waste Permit Information Form of the approved permit application, air pollution control scrubber sludge, wastewater sludge generated at the on-site treatment plant, and soils excavated on site for remediation purposes. Prior to landfilling, all hazardous waste shall be treated to meet the Land Disposal Restrictions (LDR) in 40 C.F.R. Part 268.

K069* Emissions control dust from secondary lead smelting.

*According to 40 C.F.R. § 261.32, K069's listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further action is taken.

B. Waste Quantities

1. Phase I

The maximum quantity of wastes that may be disposed is 300,000 cubic yards of material. Disposal and management of waste in Phase I shall not come into contact with unlined phases of the landfill, regardless of compliance with the permitted capacity.

2. Phase II

The maximum quantity of wastes that may be disposed is 81,000 cubic yards of material. Disposal and management of waste in Phase II shall not come into contact with unlined phases of the landfill, regardless of compliance with the permitted capacity.

3. Phase III

The maximum quantity of wastes that may be disposed is 373,000 cubic yards of material.

C. Design and Operating Requirements

1. The landfill shall have a liner system designed, constructed, and installed to meet the requirements of 40 C.F.R. §§ 264.301(a) and 264.301(c), and as specified in the approved permit application.

2. The landfill shall have a leachate collection system (LCS) above the primary liner and a leak detection system (LDS) between the primary synthetic liner and lower composite liner. The systems shall be designed, constructed and installed to meet the requirements of 40 C.F.R. § 264.301(c), and as specified in the approved permit application. The LDS shall serve to detect leakage through the primary liner.

3. The LCS, LDS, and internal contact storm water runoff collection system, including the manhole and clean-outs, shall be maintained to gravity feed liquids from the landfill to the on-site wastewater treatment plant, as specified in the approved permit application.

4. According to 40 C.F.R. § 270.32(b)(2), the Permittee shall analyze liquids from the LDS at least annually. If leachate is not generated within the LDS, an annual analysis shall be completed on leachate collected from the LCS. The leachate shall be analyzed for all analytical parameters identified in Table 3.

5. The Permittee shall design, construct, operate, and maintain run-on and runoff control systems, as required by 40 C.F.R. §§ 264.301(g)

and 264.301(h), respectively, and as specified in the approved permit application.

6. If operating the landfill demonstrates the landfill contains particulate matter subject to wind dispersal, the Permittee shall cover or otherwise manage the landfill to control wind dispersal to meet the regulatory requirements of 40 C.F.R. § 264.301(j). If wind dispersal control is necessary, the Permittee shall submit a Class 1 Permit Modification to the Department for review and approval.

7. The Permittee shall monitor the LCS and LDS as specified in the approved permit application.

   a. If the measured flow rate within the LDS exceeds a monthly average of 500 gallons per acre per day (gpad), the Permittee shall:

      (1) Notify the Department within seven calendar days of the Permittee determining the average monthly flow rate of 500 gpad has been exceeded. The exceedance shall be documented in the facility operating record.

      (2) Submit to the Department, a report summarizing the previous month's average daily flow rates. The Permittee shall continue submitting this report on a calendar monthly basis until the measured flow rate decreases below an average monthly flow rate of 500 gpad.

      (3) Submit to the Department, a review of the latest annual analysis of leachate from the LDS, as required by 40 C.F.R. § 270.32(b)(2), and this Permit, with an assessment as to the need for a repetitive chemical analysis of the LDS leachate.

   b. If the measured flow rate within the LDS exceeds a monthly average of 1,200 gpad, the Permittee shall:

(1) Notify the Department within 15 calendar days of the Permittee determining the average monthly flow rate of 1,200 gpad has been exceeded.

(2) Conduct a detailed, specific assessment of the elevated leakage rate. If the Permittee determines no remedial action is warranted, the Permittee shall submit to the Department, a report summarizing the elevated leakage rate assessment and a detailed justification for not conducting remedial work. If the assessment determines that remedial action is warranted, the Permittee shall develop and implement a remedial plan to reduce liquid movement through the primary synthetic liner to less than 1,200 gpad. The Department shall review and approve the assessment and subsequent remedial plan according to the procedures described in General Permit Condition IV., before implementation.

8. The Permittee shall notify the Department, as soon as practicable, when Phase II of the landfill reaches 90 percent of the permitted capacity.

9. The Permittee shall operate a decontamination station to decontaminate all vehicles and equipment that come into contact with the landfilled waste, before exiting the landfill. Decontamination of all vehicles and equipment shall occur any time contact with the landfilled waste occurs, except during periods of freezing temperatures and/or weather conditions conducive to ice formation on travel surfaces. All rinsate shall be applied to allow infiltration into the landfill, and shall not cause surface run-off or non-stormwater discharge. All rinsate shall be collected and treated on-site, before being discharged according to the Permittee's MO-0101702 operating permit.

10. The Permittee shall notify the Department before any construction and/or repairs occur within the boundary of the operating landfill. Routine maintenance activities for the landfill and supporting equipment are exempt from this requirement. The boundary includes all contiguous property bounded by the point of compliance wells.

11. The Permittee shall implement an inspection program and maintain inspection records for the landfill, according to 40 C.F.R. §§ 264.15 and 264.303, and as specified in the approved permit application. While in operation, the Permittee shall inspect the landfill weekly and after storm events, according to 40 C.F.R. § 264.303(b). The Permittee shall maintain operation and inspection records of the landfill, according to 40 C.F.R. § 264.73 and as specified in the approved permit application.

12. At least annually, the storm water collection, LCS, and LDS lines shall be cleaned with a high pressure wash system to maintain the lines in a free flowing condition and check the integrity of the lines. Compliance with this annual requirement shall be documented in the facility operating record.

13. The Permittee shall construct the landfill according to the landfill design, as specified in the approved permit application, Department-approved construction plans and specifications, the construction QA/QC plan, and this Permit.

D. Waste Analysis and Confirmation Sampling

The Permittee shall characterize all material being placed into the landfill according to the waste analysis plan included in the approved permit application, and the following conditions:

1. To document compliance with LDRs, on a calendar-quarterly basis, the Permittee shall sample and analyze material from one treated batch to be placed in the landfill, using the Toxicity Characteristic Leaching Procedure (TCLP) test.

2. If a quarterly sampled batch fails to meet LDR standards, the treated material shall be retested to determine if the failure was due to an analytical error, or if the treatment process failed to meet LDRs. If an analytical error occurred, this shall be documented in the operating record and testing shall continue on a calendar-quarterly basis. If it is determined the treatment process failed to meet LDRs, the following conditions shall apply:

a. The Permittee shall notify the Department within 14 calendar days of determining a sample failed to meet LDRs; and

b. If the TCLP test demonstrates the treated material does not meet LDRs, the material shall be retreated until LDRs are met and the following sampling and analysis schedule shall be implemented:

(1) For a minimum of four consecutive weeks, the Permittee shall analyze one sample per week from one treated batch per week to be placed in the landfill.

(2) Based on a minimum of four consecutive weeks of sampling, if it is demonstrated that a specific parameter(s) meets LDRs, the testing frequency of that parameter(s) shall be reduced to calendar-quarterly analysis.

VII. Landfill 2 Closure [40 C.F.R. § 264.310 and 40 C.F.R. Part 264 Subpart G]

A. According to 40 C.F.R. § 264.111, the Permittee shall close Landfill 2 in a manner that:

1. Minimizes the need for further maintenance; and

2. Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure releases of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the soils, ground or surface waters, or atmosphere.

B. Before beginning closure of the landfill, the Permittee shall submit to the Department for review and approval, construction drawings, specifications, and a CQA plan, suitable for bid submittals.

C. According to 40 C.F.R. § 264.112(c), the Permittee shall submit to the Department, a written notification of or request for a permit modification to amend the Closure Plan included in the approved permit application.

D. The Permittee shall notify the Department, in writing, at least 60 calendar days before the date final closure of the landfill is expected to begin.

E. The final cover for the landfill shall be constructed as specified in the approved permit application and Department-approved design drawings, specifications, and CQA plan. According to 40 C.F.R. § 264.310 and this Permit, the final cover system shall be designed and constructed to:

1. Provide long-term minimization of liquid migration through the closed landfill;

2. Function with minimum maintenance;

3. Promote drainage and minimize erosion or abrasion of the cover;

4. Accommodate settling and subsidence so the cover's integrity is maintained; and

5. Have a permeability less than or equal to the permeability of any bottom liner system.

F. According to 40 C.F.R. § 264.115, within 60 calendar days of final closure, the Permittee shall submit to the Department, by certified mail, a certification that the landfill was closed according to this Permit and all approved design drawings, plans, and specifications. The certification shall be signed by the Permittee and a professional engineer registered in Missouri. Supporting documentation shall be included with the engineer's certification.

G. According to, and as specified in, 40 C.F.R. § 264.116, no later than the submission of the certification of the final closure of the landfill, the Permittee shall submit to the Department and local zoning authority, or the authority with jurisdiction over local land use, a survey plat indicating the exact location and dimensions of each landfill cell with respect to permanently surveyed benchmarks. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, shall contain a prominently displayed note that states the owner's or operator's obligation to restrict disturbing the hazardous waste disposal unit according to the applicable requirements in 40 C.F.R. Part 264 Subpart G. The plat shall be prepared and certified by a professional land surveyor registered in Missouri.

H. According to 10 CSR 25-7.264(2)(G)3. and 4., upon certification of final closure of the landfill, the Permittee shall record a restriction on an instrument normally examined during a title search that will, in perpetuity, notify any potential purchasers that the land has been used to manage hazardous waste. Within 30 calendar days after recording the instrument in the chain-of-title for the facility property, the Permittee shall submit to the Department a notarized statement certifying the instrument has been recorded with the County Recorder of Deeds. Copies of the recorded pages that show the instrument has been recorded and become part of the property record shall be included with the notarized statement. The Permittee shall comply with the Missouri Environmental Covenants Act, Sections 260.1000 through 260.1039, RSMo.

VIII. Post-Closure [40 C.F.R. Part 264 Subpart G]

The Permittee shall comply with all applicable requirements of 40 C.F.R. Part 264 Subpart G, and all provisions of this Permit.

A. Post-Closure Care and Use of Property [40 C.F.R. § 264.117]

1. According to 40 C.F.R. § 264.117(a)(1), post-closure care begins after accepting the hazardous waste management unit closure certification and continues for 30 years after that date, unless modified according to 40 C.F.R. § 264.117(a)(2) or otherwise specified by the Department.

   a. The Department accepted the closure certification for Landfill 1 on November 16, 1992, starting the post-closure care period. The post-closure care plan was submitted as part of the RCRA Hazardous Waste Permit Application dated November 4, 1988. The post-closure plan was later modified on April 2, 1997, and February 25, 2009. Post-closure care shall continue until November 16, 2022.

   b. Post-closure care for Landfill 2 shall begin after Landfill 2 has been closed and the Department has accepted the closure certification, and shall continue for 30 years after that date.

2. At a minimum, post-closure care shall be extended until such time as the groundwater protection standard maximum concentration limits (MCLs) contained in 40 C.F.R. § 264.94, Table 1 or approved alternate concentration limits, as applicable, are met for a period of

three consecutive years under the groundwater monitoring conditions described in Special Permit Conditions IX. and X.

3. During the post-closure care period, the Permittee shall comply with the applicable maintenance, monitoring, and reporting requirements in 40 C.F.R. Part 264 Subparts F, G, and N.

4. During the post-closure care period, the Permittee shall comply with the requirements of 40 C.F.R. § 264.310, including, but not limited to:

   a. Maintaining the integrity and effectiveness of the final covers;

   b. Continuing to operate the LCS as outlined in the approved permit application;

   c. Maintaining and monitoring the LDS and complying with all applicable LDS requirements as outlined in the approved permit application;

   d. Maintaining and monitoring the groundwater monitoring system and complying with all applicable requirements of 40 C.F.R. Part 264 Subpart F;

   e. Preventing run-on and runoff from eroding or otherwise damaging the final covers; and

   f. Protecting and maintaining surveyed benchmarks used to comply with 40 C.F.R. § 264.309.

5. In the event a significant ground subsidence or collapse occurs within 1,000 feet of any active hazardous waste management (regulated) unit, SWMU, AOC, or area under post-closure care, the Permittee shall notify the Department, verbally or in writing, within 5 calendar days of becoming aware of a subsidence or collapse feature. The Permittee shall also notify the Department of any subsidence or collapse within the facility property boundary that alters surface or groundwater flows to or from any land-based units closed with waste in place. The Permittee shall allow the Department to inspect the feature in order to evaluate the subsidence or collapse before conducting any repairs. Within 30 calendar days of the Department's written request, the

Permittee shall prepare and submit to the Department for review and approval, a plan for repairing the feature. Any repair plan submitted to the Department shall contain post-repair reporting provisions that include providing detailed documentation of the location, repair work conducted, before and after photographs, etc., in a final report to the Department.

6. The Permittee shall continue to providing proper operation and maintenance of any engineering controls implemented as part of the approved permit application. These actions are necessary to prevent human exposure to soils and/or groundwater contaminated with hazardous wastes or hazardous constituents in concentrations exceeding applicable regulatory risk-based criteria. The engineering controls shall not be disturbed and shall remain in place and be effective unless or until the Department provides written approval to alter, modify, eliminate, or otherwise cease operating and maintaining such controls.

7. Post-closure use of the property shall be restricted by the Permittee to prevent disturbance of the integrity of the final cover on Landfills 1 and 2, and to prevent damage to the monitoring systems. The Department may approve a use of the property that disturbs the integrity of the final covers if it is necessary for the proposed use of the property and will not increase the potential hazard to human health or the environment, or if it is necessary to reduce a threat to human health or the environment. The Permittee shall submit a request to the Department before any activities that disturb the integrity of the final cover.

8. The Permittee may submit a request to the Department to shorten the post-closure care period. Justification for shortening the post-closure care period shall accompany any such request. The Department may approve the request if it determines a shortened post-closure care period is sufficient to protect human health and the environment. Approval to shorten the post-closure care period shall be according to the applicable permit modification procedures in 40 C.F.R. Part 270, 10 CSR 25-7, and 10 CSR 25-8.124.

B. Post-Closure Plan and Amendments [40 C.F.R. § 264.118]

1. Post-closure care shall be conducted according to the post-closure care plan, included in Appendix I of the approved permit application, and all conditions of this Permit.

2. The post-closure care plan(s) may be amended at any time during the active life of the facility or the post-closure care period. Amendments are subject to the applicable permit modification requirements of 40 C.F.R. Part 270 Subpart D and 10 CSR 25-8.124. Written requests for amendments shall be submitted at least 60 calendar days before the proposed change in site operations for Landfill 2 or post-closure care for Landfill 1, or no later than 60 calendar days after the occurrence of an unexpected event that affected the post-closure care plan(s).

   The Department may request modifications to the post-closure care plan if changes in site operations affect the approved post-closure care plan(s). No later than 60 calendar days after receiving the Department's request, the Permittee shall submit the modified post-closure care plan(s). Any modifications requested by the Department are subject to the applicable permit modification requirements in 40 C.F.R. Part 270 Subpart D and 10 CSR 25-8.124.

3. The facility contact shall keep the approved post-closure care plan(s) during the post-closure care period, as required by 40 C.F.R. § 264.118(c).

C. Future Removal of Hazardous Wastes [40 C.F.R. § 264.119(c)]

Except as required to facilitate Department-approved corrective actions, if the Permittee wishes to remove hazardous wastes, hazardous waste residues, contaminated soils, or contaminated sludges from within the boundaries of Landfill 1 and Landfill 2, the Permittee shall request a modification of this Permit, according to the applicable requirements in 40 C.F.R. Part 270 Subpart D and 10 CSR 25-8.124. The modification request shall include a demonstration that the proposed action(s) will not increase potential hazards to human health or the environment, or the action(s) is necessary to reduce threats to human health or the environment, according to 40 C.F.R. § 264.117(c). By removing contaminants, the Permittee may become a

hazardous waste generator. The Permittee shall manage any removed material according to all applicable laws, regulations, and ordinances.

D. Certification of Completion of Post-Closure Care [40 C.F.R. § 264.120]

No later than 60 calendar days after completing the post-closure care period(s) (including any necessary extensions), the Permittee shall submit to the Department, by certified mail, a certification that the post-closure care period was performed according to the approved post-closure plan(s). The certification shall be signed by the Permittee and a professional engineer registered in Missouri, and shall include documentation supporting the certification.

IX. Groundwater Monitoring [40 C.F.R. Part 264 Subpart F]

A. Groundwater Protection Standard (GPS), Hazardous Constituents, and Concentration Limits [40 C.F.R. §§ 264.92, 264.93, and 264.94]

1. The GPS establishes the maximum concentration limits (MCLs) for hazardous constituents in the groundwater at and beyond the point of compliance during the compliance period. Statistical evaluation of the groundwater detection monitoring data shall be conducted as described in the approved SAP and shall be performed on all hazardous constituents and indicator parameters outlined in Table 3. The statistical evaluation shall be based on the methods contained in the most recent version of the EPA document entitled, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, EPA 530-R-09-007, March 2009, and any subsequent addenda, or other methods approved in advance by the Department. If the Permittee determines, according to 40 C.F.R. § 264.98(g), that there is a statistically significant increase (or decrease in pH) over background levels for any parameter listed in Table 3 at any point of compliance monitoring well(s), the Permittee shall:

a. Notify the Department, in writing, within seven calendar days. The notification shall indicate what parameters or hazardous constituents have shown statistically significant increases and in which well(s);

b. Sample at the affected point of compliance well(s) for all detection monitoring parameters outlined in Table 3, to confirm the increase. The confirmation sampling shall be performed immediately, and in no case exceed 30 calendar days from the date of evidence of a statistically significant increase;

c. Compare point of compliance well samples to established background concentrations for each constituent detected at the compliance point; and

d. Within 60 calendar days of such determination, submit a Class 3 permit modification to establish a compliance monitoring program according to 40 C.F.R. § 264.99.

2. If the Permittee determines there is a statistically significant increase (or decrease in pH) over background levels for any parameter listed in Table 3 at any point of compliance monitoring well(s), the Permittee may demonstrate that a source other than the regulated unit caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the Permittee may make a demonstration under this paragraph in addition to, or in lieu of, beginning the compliance monitoring program according to Special Permit Condition IX.E.4., the Permittee is not relieved of the requirement to begin a compliance monitoring program within the time specified in Special Permit Condition IX.A.1(d)., unless the demonstration successfully shows a source other than a regulated unit resulted in the increase or that the increase resulted from an error in sampling, analysis, or evaluation. For the demonstration under this paragraph to be considered, the Permittee shall complete at least the following requirements:

a. Within seven calendar days of determining a statistically significant increase at the compliance point has occurred, notify the Department, in writing, that the Permittee intends to make a demonstration under this paragraph;

b. Within 90 calendar days, submit a report to the Department that demonstrates a source other than the regulated unit caused

the increase or that the increase resulted from an error in sampling, analysis, or evaluation; and

c. Continue to monitor according to the detection monitoring program established under Special Permit Condition IX.E.

B. Point of Compliance (40 C.F.R. § 264.95)

The point of compliance is defined as "a vertical surface located at the hydraulically down-gradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units." For the purposes of this Permit, the waste management area is described by an imaginary line circumscribing Landfill 1 and Landfill 2. The point of compliance monitoring wells encompass both Landfill 1 and Landfill 2, and contain the following wells: OW-201, OW-202A, OW-203A, OW-204B, OW-206, OW-209, and OW-212.

C. Compliance Period (40 C.F.R. § 264.96)

A compliance period for Landfill 1 and Landfill 2 does not need to be established unless and until a groundwater compliance monitoring program becomes necessary pursuant to 40 C.F.R. § 264.99. If needed, the compliance period shall be established by a permit modification, according to 40 C.F.R. § 270.42.

D. General Groundwater Monitoring Requirements [40 C.F.R. § 264.97]

1. The Permittee shall comply with applicable sections of 40 C.F.R. § 264.97 for detection monitoring systems, as specified in 40 C.F.R. § 264.98 and this Permit. All SAP procedures and techniques used in groundwater sampling, frequency, analysis, and measurement of groundwater-related parameters shall be designed to meet the requirements of 40 C.F.R. Part 264 Subpart F and this Permit. The Permittee's sampling, analysis, and measurement protocols shall ensure the representative nature of all analysis and measurement results.

2. Within 60 calendar days of the effective date of this Permit, the Permittee shall submit to the Department for review and approval, a final SAP/QAPP, to reflect any additional requirements contained in

this Permit. The final SAP/QAPP shall be revised as necessary to be consistent with groundwater and surface water monitoring permit conditions.

3. The Permittee shall retain a copy of the approved groundwater SAP with the local facility representative and/or at the facility and comply with the approved sampling and analysis procedures in order to provide a reliable indication of the groundwater quality below Landfill 1 and Landfill 2. The groundwater SAP shall describe sample collection, preservation, and shipment methodology; chain-of-custody procedures; and analytical methodology for field samples, trip blanks, and other quality control samples.

4. If the Permittee or Department determine a point of compliance (detection monitoring) well is incapable of adequately detecting a release from Landfill 1 or Landfill 2, the Permittee shall redevelop, repair, or replace the well, as appropriate, to meet the requirements of 40 C.F.R. § 264.97(a)(3) before the next regularly scheduled sampling event. Criteria and procedures for well redevelopment, repair, and replacement shall be performed according to the Missouri Well Construction Rules (10 CSR 23-1 through 10 CSR 23-4) and Sections 256.600 through 256.640, RSMo.

5. Any new groundwater monitoring well(s) installed by the Permittee to meet the requirements of this Permit shall be designed and constructed according to the requirements of 40 C.F.R. § 264.97, the Monitoring Well Construction Code of the Missouri Well Construction Rules (10 CSR 23-1 through 10 CSR 23-4), and/or Department-approved well-specific plans and specifications.

6. Plugging and abandoning any groundwater monitoring well(s) operated by the Permittee pursuant to the requirements of this Permit shall meet the requirements of Section 256.614, RSMo, and 10 CSR 23-4.080.

    a. The Permittee shall submit to MGS and WMP, a copy of the well registration report form and resulting registration acceptance required by 10 CSR 23-4.080, for any monitoring wells plugged pursuant to this Permit. This information shall be

reported as part of the Annual Groundwater Monitoring Report required by Special Permit Condition IX.E.

b. At such time as MGS accepts the Permittee's well registration, the plugged wells shall be removed from the Permittee's groundwater SAP. Within 30 calendar days of MGS' registration acceptance, the Permittee shall submit appropriate SAP revisions to the Department for review and approval, according to the procedures described in General Permit Condition IV.

7. According to 40 C.F.R. § 270.42, a Class 2 Permit Modification is required for any change in the number, location, depth, or design of the point of compliance wells monitoring Landfill 1 and Landfill 2. Replacement of any point of compliance wells without changing their location, depth, or design shall require a Class 1 permit modification without prior Director approval, according to 40 C.F.R. § 270.42. The Permittee may elect to submit an annual permit modification to address these changes collectively in lieu of a modification for each individual change.

8. The Permittee shall contact the Department at least five working days before conducting any field work associated with constructing or modifying the groundwater monitoring system required by this Permit. The Department shall then have the option to observe any part of the system's construction or modification. This notification requirement applies to major work such as new wells, retrofitting existing wells, or abandoning wells. It does not apply to minor repairs, minor maintenance, or other minor changes.

9. A monitoring well inspection and maintenance program shall be implemented for the duration of the groundwater monitoring program pursuant to this Permit. This program shall be designed to ensure the structural integrity of all monitoring well installations is adequate to produce reliable monitoring results. The Permittee's groundwater SAP shall specify the details of this program relative to the following requirements.

a. Surface well equipment integrity inspections shall be performed at the time of each sampling event and shall be

documented on a well inspection checklist. Surface equipment integrity evaluations for each monitoring well shall include a visual inspection of the outer protective casing, inner casing riser, surface well seal, well cap, and locking mechanism, to document any damage or deterioration. The ground surface in the immediate vicinity of each monitoring well and the annular space between the outer protective casing and casing riser shall be inspected for visible anomalies (e.g., water collection or ponding, ground subsidence, etc.).

b. Subsurface well integrity inspections shall be performed annually on all wells, according to the provisions contained in the Permittee's approved SAP, and shall be documented on a well inspection checklist. Subsurface well integrity inspections may consist of a combination of elements, including total well depth measurements, groundwater turbidity measurements, in-situ hydraulic conductivity tests, casing caliper logs, down-hole television camera surveys, and/or other methods capable of verifying the subsurface integrity of the well casing and screen.

c. Wellbore siltation evaluations shall be conducted annually on all monitoring wells (e.g., point of compliance and investigation). The Permittee's approved SAP shall specify performance standards for this evaluation to assess down-well siltation and well screen occlusion in all monitoring wells. This evaluation shall be designed to ensure the representative nature of the Permittee's groundwater sample, analysis, and field measurement results through minimizing sampling and measurement interferences (e.g., turbidity, excessive well screen occlusion, etc.).

The Permittee's approved SAP shall specify a well redevelopment trigger criterion based on a percentage of well screen occlusion and the potential of such occlusion to compromise the representative nature of the Permittee's groundwater sample, analysis, and field measurement results. Wells demonstrating well screen occlusion equal to or in excess of the selected criterion (no greater than 10 percent occlusion) shall be redeveloped before the next regularly scheduled sampling event.

d. The Permittee shall perform well-specific surface and subsurface integrity inspections within seven calendar days following any naturally-occurring (contact of wells by flood waters, tornado, etc.) or man-made event (vehicular contact, vandalism, etc.) that has the potential to compromise the structural integrity of the well.

e. Monitoring well repairs shall be started within 30 calendar days of identifying any surface or subsurface well integrity problem(s). If adverse weather or site conditions prevent the Permittee from gaining access to and/or repairing impacted monitoring wells within 30 calendar days, the Permittee shall take appropriate action as soon as possible. A written justification for any delay, completed well inspection checklists, a narrative description of any well repairs, and before and after repair photographic documentation (in the case of visible surface well repairs) shall be provided to the Department as part of the Annual Groundwater Monitoring Report required by Special Permit Condition IX.E.

E. Detection Monitoring Program [40 C.F.R. § 264.98]

1. The Permittee shall determine groundwater quality and elevation semi-annually, according to the monitoring frequency and required parameters summarized in Table 3.

a. Sampling and analysis according to this schedule shall begin during the next regularly scheduled sampling event following the effective date of this Permit.

b. Sampling and analysis of groundwater from any new wells required by 40 C.F.R. Part 264 Subpart F and this Permit shall be performed no later than the next regularly scheduled sampling event following their installation.

2. Only single sample analyses (as opposed to replicates) are required for the parameters listed in Table 3, with the exception of duplicate samples taken for QA/QC purposes.

3. Field parameter values measured and reported by the Permittee shall be representative of stabilized well conditions.

4. An evaluation of statistically significant increases in the groundwater monitoring parameters shall be conducted according to the procedures described in the approved SAP.

5. The Permittee shall initiate procedures, as described in the approved SAP and this Permit, as a response to demonstrated statistically significant increases in the groundwater monitoring parameters.

6. The Permittee shall perform groundwater analyses every five years for the select parameters identified in Table 3, unless triggered sooner due to a statistically significant increase, as outlined in Special Permit Condition IX.E.

Table 3 - Groundwater Monitoring, Sampling, Analysis, and Parameter Measurement Schedule

Parameters	Type**	Maximum Detection Limit (µg/L)	Frequency
Antimony*	HC	1.0 (a)	Every five years
Arsenic*	HC	1.0 (a)	Semi-annually
Barium*	HC	4.0 (a)	Every five years
Cadmium*	HC	1.0 (a)	Semi-annually
Chromium*	HC	10.0(a)	Semi-annually
Copper*	IN	4.0 (a)	Semi-annually
Lead*	HC	4.0 (a)	Semi-annually
Nickel*	HC	4.0 (a)	Semi-annually
Selenium*	HC	4.0 (a)	Every five years
Silver*	HC	4.0 (a)	Every five years
Cobalt*	IN	4.0 (a)	Every five years
Mercury*	HC	1.0 (a)	Every five years
Thallium*	HC	1.0 (a)	Every five years
Tin*	IN	42 (a)	Every five years
Vanadium*	IN	10.0 (a)	Every five years
Zinc*	IN	10.0 (a)	Semi-annually
Sulfate	IN	1000.0 (a)	Semi-annually
pH	FM/IN	Not Applicable	Semi-annually
Specific Conductance	FM/IN	Not Applicable	Semi-annually
Static Groundwater Elevation (b)	FM	Not Applicable	Semi-annually
Temperature	FM	Not Applicable	Semi-annually
Total Well Depth	FM	Not Applicable	Annually

(a) Detection Limit based on the lowest achievable practical quantitation limit available from the Permittee's contract laboratory.

(b) Potentiometric measurements shall be obtained at the time of each regularly scheduled sampling event from each sampled well. Elevation shall be to the nearest 0.01 foot.

* Total Recoverable Metals

** HC = Hazardous Constituent, FM = Field Measurement, IN = Indicator

X. Annual Groundwater Monitoring Report

The Permittee shall prepare and submit to the Department, Annual Groundwater Monitoring Reports, giving a comprehensive evaluation of the facility-wide groundwater monitoring program for the previous calendar year (i.e., January through December). Annual Groundwater Monitoring Reports are due by March 1 of each calendar year for the previous calendar year. The Annual Groundwater Monitoring Reports and Annual Progress Reports, required by Corrective Action Condition XI., may be combined and submitted as a single report. The Annual Groundwater Monitoring Reports shall include the following information for the time period being reported:

A. Narratively discuss the nature and evolution of the Permittee's facility-wide groundwater monitoring program, as well as conclusions concerning the overall adequacy of the program as related to its intended purpose, including any interim measures/stabilization measures. Any conclusions concerning inadequacies in the Permittee's groundwater monitoring program shall be accompanied by a discussion of proposed remedies. The Permittee shall further develop specific details concerning any proposed remedies outside of the scope of these reports or as otherwise specified in this Permit;

B. Comprehensively address all technical requirements of 40 C.F.R. Part 264 Subpart F and this Permit. The Permittee shall summarize relevant groundwater monitoring information and shall present this information in the form of narrative discussions, groundwater flow calculations, and/or diagrammatic illustrations (e.g., tabular groundwater and statistical data summaries, hydrogeologic and potentiometric contour maps/cross-sections, chemical parameter trend graphs, calculated rate(s) of contaminant migration, contaminant isoconcentration maps/cross-sections, fence/isometric diagrams, groundwater flow nets, etc.), as appropriate; and

C. Contain detailed boring logs for new exploratory borings and/or detailed "as-built" monitoring well diagrams for any new monitoring wells installed during the corresponding reporting period.

CORRECTIVE ACTION CONDITIONS

The Permittee shall comply with all applicable post-closure care, groundwater monitoring, and corrective action requirements contained in 40 C.F.R. Part 264 Subparts F, G, and all provisions of this Permit, for all previously and any newly identified SWMUs, AOCs, and releases identified pursuant to the provisions of this Permit.

I. Identification of SWMUs and AOCs

A. Ecology and Environment, Incorporated, on behalf of EPA, completed a Preliminary Assessment and separate Site Investigation to identify and gather information on releases or potential releases from SWMUs and AOCs at the facility, including those that appeared to require further investigation. The resulting "Site Investigation Report for Schuylkill Metals Corporation Forest City, Missouri", dated June 4, 1986, and "Biological Assessment Schuylkill Metals Corporation Forest City, Missouri", dated March 31, 1994, are considered a compiled RCRA Facility Assessment (RFA). The reports identified nine SWMUs and two AOCs in the area of the facility. The reports concluded that the nine SWMUs required further investigation and/or remediation.

As investigations continued, two SWMUs and two AOCs were identified in the Groundwater Characterization Report, dated April 14, 1995. Two SWMUs were identified in the Phase II RCRA Facility Investigation (RFI) version 1.0, dated October 1, 2001. One SWMU was also identified in the RCRA Hazardous Waste Permit Application, dated March 27, 2019. In total, 14 SWMUs and 2 AOCs have been identified at the facility. The approximate locations of the SWMUs and AOCs at the facility are shown in Figure 4. The SWMUs and AOCs identified are as follows:

1. SWMUs 1-3 – Closed Slag Pile Surface Areas #1, #2, and #3

These areas were used to store waste secondary smelter slag until Landfill 1 was constructed in 1981. Some slag in Slag Pile Surface Area #1 has been removed and landfilled, and the pile has been closed with compacted loess. The slag in Slag Pile Surface Area #2 was removed and landfilled. The slag in Slag Pile Surface Area #3 remained in place and the pile closed and was covered with compacted loess.

2. SWMUs 4-7 – Closed Surface Impoundments #1, #2, #3, and #4

Prior to 1983, waste battery acid underwent neutralization and sedimentation in a series of concrete pits. Until the wastewater treatment plant was constructed in 1983, effluent from the neutralized and settled waste battery acid was disposed in Surface Impoundments (SI) #1, #2, #3, and #4. In 1983, the wastewater flowing to the

impoundments was rerouted to the newly constructed wastewater treatment plant. The sediments in the impoundments were excavated, recycled through the smelter, and the resulting slag was placed in the on-site landfill in December 1983. Clean soil was placed in the impoundments and covered with a 2-foot compacted clay layer graded to achieve 2 to 4 percent slopes. SI #1 and #2 were paved. SI #3 and #4 were capped with a 1-foot vegetative cover.

3. SWMU 8 – Closed Rubber Chip Storage Area

Rubber chips from broken battery cases were stored at this location in a stockpile until Landfill 1 was constructed. Most of the chips were removed and landfilled; however, some remained in place. During landfill construction, the Rubber Chip Storage Area was covered with excavated soils.

4. SWMU 9 – Closed Battery Case Disposal Area

Available information indicates this is an approximate 75 foot by 125 foot area located south of the facility. Battery cases (whole and broken) and possibly some dry batteries were deposited in this area in 1975 and 1976. The disposal area was capped with a 4 foot layer of loess-clay.

5. SWMU 10 – Landfill 1

The original 1andfill was constructed in 1981. Landfill 1 was used to dispose of slag from the smelting process, dewatered sludge from the water treatment process, rubber battery case chips, and sludge from the sulfur dioxide air emission scrubber. Landfill 1 entered its post-closure care period in November 1992.

6. SWMU 11 – Landfill 2

Landfill 2 is a regulated active hazardous waste landfill unit. Currently operating Phase II, Landfill 2 is used to dispose slag from the smelting process, dewatered sludge from the water treatment process, rubber battery case chips, and sludge from the sulfur dioxide air emission scrubber.

7. SWMU 12 – Equalization Lagoon

   The equalization lagoon was constructed in 1983. Waste battery acid, process wastewater, and effluent from the showers and laundry are treated at the wastewater treatment facility. The effluent from the plant flows in a separate sewer system to the equalization lagoon.

8. SWMU 13 – Septic Lagoon

   Waste from the lavatories and rest rooms are channeled to the septic lagoon.

9. SWMU 14 – Battery Storage Building

   The Battery Storage Building was historically used for battery breaking operations, as part of the plant's recycling activities. Since the 1998 sampling and analysis investigation, the building has been used to store new, non-regulated, non-waste materials, such as bags of lime, pre-coat (diatomaceous earth), grout, and mortar, as well as pallets of new refractory bricks and new machine parts. The Permittee's Missouri Hazardous Waste Management Facility Part I Permit, dated September 23, 2009, allowed the building to be modified to a RCRA-regulated Container Storage Area. The Permittee never modified the building to allow for the permitted storage. The Permittee requested the Department remove the unit from the Permit, which the Department approved February 26, 2018. The Permittee performed closure activities at the building, resulting in a "no further action" determination by the Department on March 12, 2019. Exide plans to make upgrades to the building, including construction of a new concrete floor, and intends to use the building to store spare maintenance parts.

10. AOC 1 – Smelter Building Areas

    Smelting operations are conducted using a blast furnace, five pot furnaces, and a reverberatory furnace.

11. AOC 2 – Baghouse/SO_2

Particulate matter is collected on the emission filters and is disengaged by pulse vibration and reintroduced into the smelting process. SO_2 is scrubbed from the stack emissions with an aqueous scrubber.

B. The status of the known SWMUs and AOCs is based on available information at the time of issuance of this Permit. In the event new information becomes available indicating human health or the environment may be adversely impacted, the Permittee may be required to conduct additional investigations and evaluations, as necessary, to determine the need for additional corrective action for the previously identified SWMUs and AOCs, or any newly identified SWMUs and AOCs, including off-site release(s), as specified in Corrective Action Conditions II. and III.

C. As deemed appropriate by the Department, the Permittee shall conduct additional investigation(s) and/or take corrective action for any previously or newly identified SWMUs and AOCs, including off-property release(s), demonstrating the releases of hazardous waste or hazardous constituents to soil, surface water, sediment, groundwater, and/or air are in excess of applicable regulatory thresholds, as specified in Corrective Action Conditions II. through IX. Any off-property impacts to surface water, sediment, soil, or groundwater shall be addressed to the extent that these media are impacted by releases to surface water, sediment, soil, or groundwater originating from SWMUs, AOCs, or other releases on the facility property.

II. Notification Requirements for, and Assessment of, Newly Identified SWMU(s) and AOC(s)

A. The Permittee shall notify the Department, in writing, no later than 15 calendar days after discovery, or after discovery should have been made (e.g., visual observations, laboratory test results, or information not previously available), of any new SWMU(s) or AOC(s) identified after the issuance of this Permit. The Department may examine the facility's inspection records to determine if the Permittee should have known that a release occurred.

B. The Department may require the Permittee to conduct an investigation of any newly identified SWMU(s) or AOC(s). The Department shall notify the Permittee, in writing, of this decision. Within 30 calendar days after receiving the Department's request to conduct an investigation, the Permittee shall

prepare and submit a SWMU/AOC Assessment Work Plan to the Department for review and approval. The SWMU/AOC Assessment Work Plan shall include, but not be limited to, the following:

1. A discussion of past hazardous wastes management practices related to the unit(s);

2. A detailed investigation approach for surface and subsurface soils, surface water, groundwater, and air as necessary to:

    a. Determine if a release of hazardous wastes or hazardous constituents has occurred or is occurring at the unit(s);

    b. Yield reliable, representative samples and results;

    c. Determine impacts or potential impacts to human health and the environment; and

    d. Sufficiently assess all hazardous wastes and hazardous constituents related to the unit(s).

3. A proposed schedule for implementing the SWMU/AOC Assessment Work Plan, which is predicated on the date the Department approves the plan; and

4. Identification of all data to be collected that is necessary to provide for a complete SWMU/AOC Assessment Report, as specified below.

C. The Department shall review and approve the SWMU/AOC Assessment Work Plan according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the SWMU/AOC Assessment Work Plan, according to the schedule contained in the approved plan.

D. The Permittee shall submit a SWMU/AOC Assessment Report to the Department, according to the schedule specified in the approved SWMU/AOC Assessment Work Plan. The SWMU/AOC Assessment Report shall present and discuss the information obtained under the approved SWMU/AOC Assessment Work Plan. At a minimum, the SWMU/AOC Assessment Report

shall provide the following information for each newly identified SWMU or AOC:

1. The location of the newly identified SWMU or AOC in relation to other SWMU(s) and AOC(s);

2. The type and function of the SWMU or AOC;

3. The general dimensions, capacities, and structural description of the SWMU or AOC;

4. The period during which the SWMU or AOC was operated;

5. The physical and chemical properties of all wastes that have been or are being managed at the SWMU or AOC, to the extent possible;

6. The results of any sampling and analysis conducted;

7. Past and present operating practices;

8. Previous uses of the area occupied by the SWMU or AOC;

9. Amounts of waste handled;

10. Drainage areas and/or drainage patterns near the SWMU or AOC; and

11. A recommendation as to whether further action is necessary for the newly identified SWMU or AOC and justification for the recommendation. If further action is recommended, such as updating the site conceptual model and/or assessing SWMU/AOC-specific risk, the SWMU/AOC Assessment Report shall include a proposal for additional investigation or corrective action, as appropriate.

E. The Department shall review and approve the SWMU/AOC Assessment Report according to the procedures described in General Permit Condition IV. Based on the findings of this report and any other available information, the Department shall determine the need for additional investigation, including interim/stabilization measures or a RFI, at specific unit(s) identified in the SWMU/AOC Assessment Report.

F. If the Department determines additional investigations are needed, the Department may require the Permittee to prepare and submit to the Department for approval, a work plan for such investigations according to the applicable Corrective Action Conditions of this Permit. The Department shall review and approve any such work plan according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the work plan, according to the schedule contained in the approved plan.

III. Notification Requirements for, and Assessment of, Newly Identified Releases from Previously Identified SWMUs and AOCs

A. The Permittee shall notify the Department, in writing, no later than 15 calendar days after discovery, or after discovery should have been made (e.g., visual observations, laboratory test results, or information not previously available), of any newly identified release(s) of hazardous wastes or hazardous constituents from any previously identified SWMU(s) or AOC(s) at the facility. This includes SWMUs or AOCs being investigated and reported as part of the corrective action process, where newly identified release(s) are discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken after issuance of this Permit. The Department may examine the facility's inspection records to determine if the Permittee should have known that a release occurred.

B. The Department may require the Permittee to conduct an investigation of the newly identified release(s). The Department shall notify the Permittee, in writing, of this decision. Within 30 calendar days after receiving the Department's request to conduct an investigation, the Permittee shall prepare and submit a Newly Identified Release Work Plan to the Department for review and approval. The Newly Identified Release Work Plan shall include, but not be limited to, the following:

1. A discussion of the hazardous waste/chemical management practices related to the release(s);

2. A detailed investigation approach for groundwater, land surface and subsurface soils, surface water, and air as necessary to:

a. Define the extent of the release area(s);

b. Yield reliable, representative samples and results;

c. Determine impacts or potential impacts to human health and the environment; and

d. Sufficiently assess all hazardous wastes and hazardous constituents related to the release(s).

3. A proposed schedule for implementing the Newly Identified Release Work Plan, which is predicated on the date the Department approves the plan; and

4. Identification of all data to be collected that is necessary to provide for a complete Newly Identified Release Report, as specified below.

C. The Department shall review and approve the Newly Identified Release Work Plan according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the Newly Identified Release Work Plan, according to the schedule contained in the approved plan.

D. The Permittee shall submit a Newly Identified Release Report to the Department, according to the schedule specified in the approved Newly Identified Release Work Plan. The Newly Identified Release Report shall present and discuss the information obtained under the approved Newly Identified Release Work Plan. At a minimum, the report shall provide the following information for each newly identified release:

1. The location of the newly identified release in relation to the SWMU(s) or AOC(s) under investigation and to any other SWMU(s) and AOC(s);

2. The general dimensions of the release;

3. The period during which the release is suspected to have occurred;

4. The physical and chemical properties of all wastes that have been determined to comprise the release;

5. The results of any sampling and analysis conducted;

6. Past and present operating practices near and at the location of the release;

7. Previous uses of the area(s) occupied near and at the location of the release;

8. Amounts of waste handled near and at the location of the release;

9. Drainage areas and/or drainage patterns near and at the location of the release; and

10. A recommendation as to whether further action is necessary for the newly identified release from a previously identified SWMU(s) or AOC(s) and justification for the recommendation. If further action is recommended, such as updating the site conceptual model and/or assessing SWMU/AOC-specific risk, the Newly Identified Release Report shall include a proposal for additional investigation or corrective action, as appropriate.

E. The Department shall review and approve the Newly Identified Release Report according to the procedures described in General Permit Condition IV. Based on the findings of the report and any other available information, the Department shall determine the need for additional investigation, including interim/stabilization measures or an RFI, at specific releases(s) identified in the Newly Identified Release Report.

F. If the Department determines that additional investigation is needed, the Department may require that the Permittee prepare and submit to the Department for review and approval, a work plan for such investigations according to the applicable Corrective Action Conditions of this Permit. The Department shall review and approve any such work plan according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the work plan, according to the schedule contained in the approved plan.

IV. Interim/Stabilization Measures (ISMs)

A. Should the Permittee become aware of a situation that may require ISMs that may be necessary to protect human health or the environment, the following conditions shall apply:

1. The Permittee shall notify the Department, by e-mail or telephone within 24 hours and by letter within 7 days after becoming aware, or should have become aware, of the situation. The Department may examine the facility's inspection records to determine if the Permittee should have known ISMs might be required and notification should have occurred.

2. If, during the course of any activities initiated under this Permit, the Permittee or the Department determines a release or potential release of hazardous wastes or hazardous constituents poses a threat to human health or the environment, the Department may require ISMs in coordination with the Permittee, to slow or stop the further spread of contamination until final corrective action measures are implemented. The Department shall determine the specific action(s) that shall be taken to implement ISMs, including potential permit modifications, and the schedule for implementing the ISMs. The Department shall notify the Permittee, in writing, of decisions regarding the action(s). This requirement shall not preclude the Permittee from responding to an emergency situation without direction from the Department.

3. The Permittee shall notify the Department, in writing or by e-mail, no later than 10 calendar days after determining, or after a determination should have been made, that the ISMs are not effectively limiting or stopping the further spread of contamination. The Department may require the ISMs be revised to make them effective in limiting or stopping the spread of contamination, or that additional corrective action measures are required to address the contaminated media.

4. In cases where releases or potential releases present minimal exposure concerns and/or the remedial solution is relatively uncomplicated, the Permittee may propose ISMs to the Department for review and approval. These ISMs shall be consistent with, and may supplement or satisfy the requirements for, a final remedy(s) in specific areas. Proposed ISMs the Department determines to be significant (e.g., those which are anticipated to make up a substantial part of the final remedy) may be subject to public review and comment before final Department approval. Proposed ISMs the Department determines not to be significant will be reviewed and approved according to the procedures described in General Permit Condition IV.

V. RCRA Facility Investigation (RFI) Work Plan

A. The Permittee submitted multiple documents to the Department as Section 13, Volume 4, in the RCRA Hazardous Waste Permit Application, dated August 31, 1998. The following plans are considered the Phase I RFI Work Plan:

- Groundwater Characterization and Data Collection QA Plans, dated October 23, 1990.
- Soil Characterization Plan, dated November 14, 1990.
- Surface Water and Sediment Characterization Plan, dated December 14, 1990.
- Surface Water and Sediment Characterization Plan, dated March 24, 1991.
- Groundwater Characterization Plan, dated April 29, 1991.

B. The Permittee submitted a Phase II RCRA Facility Site Investigation Work Plan to the Department on October 1, 2001, with a response to Department comments dated June 20, 2008. The Permittee submitted a revised Phase II RFI Work Plan on May 5, 2009, which the Department responded to with comments on April 6, 2011. The Department approved a supplemental Phase II RFI Work Plan on July 3, 2012, which was designed to investigate releases of hazardous wastes and hazardous constituents to all appropriate media of concern including surface and subsurface soils, surface water, sediment, groundwater, and air, as necessary. During correspondence regarding a newly identified SWMU/AOC, the Permittee elected to prepare a revised Phase II RFI Work Plan, including submitting a site-specific background study.

In order to substantiate future corrective action decisions, the supplemental RFI Work Plan contains provisions sufficient to meet the following objectives and a proposed schedule for implementing the supplemental RFI Work Plan, which is predicated on the date the Department approves the plan:

1. Full characterization of the nature, vertical and horizontal extent, and rate of migration of releases of hazardous wastes and hazardous

constituents from SWMUs and AOCs, or groups of SWMUs and AOCs, or newly identified release(s) at the facility and the actual or potential receptors of such releases; and

2. Collection of any other pertinent data that may be used to substantiate future corrective action decisions.

C. Within 180 calendar days after receiving the Department's approval of the site-specific background study, discussed in Corrective Action Condition V.B., the Permittee shall submit the revised Phase II RFI Work Plan to the Department for review and approval.

D. If the Department determines additional investigations are needed, the Department may require the Permittee to conduct an additional supplemental RFI. The Department shall notify the Permittee, in writing, of this decision. Within 60 calendar days after receiving the Department's request to conduct a supplemental RFI, and after meeting with the Department to discuss the content of the Work Plan, the Permittee shall prepare and submit a supplemental RFI Work Plan to the Department for review and approval.

E. The supplemental RFI Work Plan shall be appropriate for facility-specific conditions and shall be consistent with and address all applicable investigation elements described in the EPA document entitled, RCRA Facility Investigation (RFI) Guidance, EPA 530/SW-89-031, May 1989, or the most recent version. Any required RFI activities shall also be conducted using the approaches contained in the EPA document entitled, Resource Conservation and Recovery Act Facilities Investigation Remedy Selection Track (RCRA FIRST): A Toolbox for Corrective Action, May 20, 2016. At a minimum, the supplemental RFI Work Plan shall detail all proposed activities and procedures to be conducted at the facility, including, but not limited to, the following:

1. A description of current conditions;

2. The schedule for implementing and completing such investigations and for submitting reports (including the supplemental RFI Report);

3. The qualifications of personnel performing or directing the investigations, including contractor personnel; and

4. The overall management of the RFI activities.

F. The supplemental RFI Work Plan includes a QAPP. The QAPP shall present the policies, organization, objectives, functional activities, and specific QA/QC activities designed to achieve the data quality goals of the supplemental RFI. It shall include, at a minimum, the supplemental RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures, data review, validation, and reporting procedures. The Permittee shall follow the EPA document entitled, EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, March 2001, (reissued May 2006) or the most recent version.

G. The Permittee shall prepare and maintain a Health and Safety Plan during the project that assures the supplemental RFI activities are conducted in a manner that is protective of human health and the environment.

H. Due to the complexity of defining the extent of contamination, the Permittee may be required to use a phased approach that requires submitting additional supplemental RFI Work Plans.

I. The Department shall review and approve the supplemental RFI Work Plan(s) according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the supplemental RFI Work Plan(s), according to the schedules contained in the approved plan(s).

VI. RCRA Facility Investigation (RFI) Report

A. The Permittee submitted multiple investigative reports to the Department as Section 13 in the RCRA Hazardous Waste Permit Application, dated August 31, 1998. Section 13 is considered equivalent to a partial RFI Report. The following facility investigation documents are considered the Phase I RFI Report:

- Sediment Characterization Study, dated June 4, 1992.
- Groundwater Level Survey and Monitoring Well Inspection Report, dated July 27, 1992.
- Groundwater Level Survey and Monitoring Well Inspection Report-Addendum No. 1, dated August 1992.

- Surface Water and Sediment Characterization Final Report, dated August 14, 1992.
- Soil Characterization Report, dated March 25, 1993.
- Groundwater Characterization Report, dated September 29, 1993.
- Storm water Characterization Report, dated April 22, 1994.
- Soil Characterization Report, dated April 22, 1994.
- Groundwater Characterization Report, dated April 14, 1995.

B. The Permittee shall submit a final Phase II RFI Report to the Department that summarizes all work completed according to the schedule specified in the approved Phase II RFI Work Plan.

C. Should additional investigations become necessary, the Permittee shall submit a supplemental RFI Report to the Department, according to the schedule specified in the approved supplemental RFI Work Plan described in Corrective Action Condition V. The supplemental RFI Report shall present all information gathered under the approved supplemental RFI Work Plan, along with a brief facility description and map showing the property boundary and all SWMUs and AOCs. The supplemental RFI Report shall contain adequate information to support additional corrective action decisions at the facility. Information contained in the supplemental RFI Report shall be presented in a format consistent with Section 5 of the EPA document entitled, RCRA Facility Investigation (RFI) Guidance, EPA 530/SW-89-031, May 1989, or the most recent version.

D. The supplemental RFI Report shall provide an interpretation of the RFI information gathered, supported with adequate documentation, to enable the Department to determine whether ISMs or a Corrective Measures Study (CMS) may be necessary. The supplemental RFI Report shall describe the procedures, methods, and results of all investigations of SWMUs and AOCs and associated releases, including, but not limited to, the following, as appropriate:

1. Characterization of the nature, concentration(s), horizontal and vertical extent, and direction/rate of migration of releases from SWMUs and AOCs at the facility;

2. Characterization of the environmental setting of the facility, including:

    a. Hydrogeological conditions;

    b. Climatological conditions;

    c. Soil and bedrock characteristics;

    d. Surface water and sediment quality; and

    e. Air quality and meteorological conditions.

3. Characterization of SWMUs and AOCs from which releases have been or may be occurring, including unit and waste characteristics;

4. Descriptions of human and environmental receptors and associated risks to the receptors which are, may have been, or, based on site-specific circumstances, could be exposed to release(s) from SWMUs and AOCs;

5. Assessment of potential risks to the human and environmental receptors exposed to release(s) from SWMUs and AOCs;

6. Extrapolations of future contaminant migration, including description of contaminant fate and transport mechanisms, and pathways for human and environmental exposure;

7. Laboratory, bench-scale, pilot-scale and/or appropriate tests or studies to determine the feasibility or effectiveness of treatment technologies or other technologies that may be appropriate in implementing remedies at the facility;

8. Statistical analyses to aid in interpreting data;

9. Results of any ISMs previously implemented; and

10. Evaluation of data quality that may affect the nature and scope of a CMS, as well as the evaluation of corrective measures alternatives thereunder (e.g., identifying any potential bias in the supplemental RFI data and documenting its precision, accuracy, representativeness, completeness, comparability, validation, etc.).

E. The Department shall review and approve the supplemental RFI Report according to the procedures described in General Permit Condition IV. If the Department determines the objectives of the supplemental RFI have not been met, the Department may require additional investigation. Upon approval of the supplemental RFI Report, the Department shall notify the Permittee, in writing, of the next step in the corrective action process, which may include submitting a CMS Work Plan or equivalent, as described in Corrective Action Condition VII.

VII. Corrective Measures Study (CMS) Work Plan

A. A formal CMS has not been conducted at this facility. Previously implemented and ongoing remediation activities have been handled through implementing regulated unit closure requirements. If the Department determines there has been a release of hazardous waste or hazardous constituents based on the Phase II Final Report or from newly or previously identified SWMUs or AOCs that may pose a threat to human health or the environment, the Department may require the Permittee to conduct a CMS or remedy evaluation. The Department shall notify the Permittee, in writing, of this decision. The notice shall identify the hazardous constituent(s) of concern and may specify remedial alternatives for the Permittee to evaluate.

B. As part of the CMS or remedy evaluation, the Department may require the Permittee to evaluate one or more specific remedial alternatives for removing, containing, and treating hazardous wastes and hazardous constituents in contaminated media, based on the objectives established for the corrective action. These remedial alternatives may include a specific technology or combination of technologies that, in the Department's judgment, may be capable of achieving standards for protecting human health and the environment.

C. Within 90 calendar days after receiving the Department's request to conduct a CMS or remedy evaluation, and after meeting with the Department to discuss the nature and scope of the supplemental CMS or remedy evaluation, the

Permittee shall prepare and submit a CMS Work Plan or Remedy Evaluation Plan to the Department for review and approval. The CMS Work Plan or Remedy Evaluation Plan shall be generally consistent with the EPA document entitled, RCRA Corrective Action Plan (Final), OSWER Directive 9902.3-2A, May 1994, or the most recent version. Any required CMS activities shall be conducted using the approaches contained in the EPA document entitled, Resource Conservation and Recovery Act Facilities Investigation Remedy Selection Track (RCRA FIRST): A Toolbox for Corrective Action, May 20, 2016. At a minimum, the CMS Work Plan or Remedy Evaluation Plan shall provide the following information, as appropriate, and a proposed schedule for implementing the elements of the CMS Work Plan or Remedy Evaluation Plan:

1. A description of the general approach to investigating and evaluating potential remedial alternatives or combinations of alternatives;

2. A definition of the specific objectives of the study/evaluation;

3. A description of the remedial alternative or combination of alternatives that will be studied;

4. A description of those potentially viable remedial alternatives initially considered, but were dropped from further consideration, including the rationale for elimination;

5. The specific plans for evaluating remedial alternatives or combination of alternatives to ensure compliance with applicable remedy selection threshold/balancing criteria and cleanup standards;

6. A schedule for conducting the study/evaluation and submitting a CMS Report or equivalent and/or preferred remedy proposal, which is predicated on the date the Department approves the CMS Work Plan or Remedy Evaluation Plan;

7. The proposed format for ranking remedial alternatives or a combination of alternatives in support of a preferred remedial alternative or combination of alternatives; and

8. Identification of laboratory, bench-scale, pilot-scale, and/or other appropriate tests or studies that will be used to determine the

feasibility or effectiveness of treatment technologies, or other technologies that may be appropriate in implementing remedial alternatives at the facility.

D. The Department shall review and approve the CMS Work Plan or Remedy Evaluation Plan according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the CMS Work Plan or Remedy Evaluation Plan, according to the schedule contained in the approved plan.

VIII. Corrective Measures Study (CMS) Report

A. Should a CMS Work Plan or Remedy Evaluation Plan become necessary, the Permittee shall submit a CMS or Remedy Evaluation Report to the Department according to the schedule specified in the approved CMS Work Plan or Remedy Evaluation Plan described in Corrective Action Condition VII. The CMS or Remedy Evaluation Report shall present all information obtained under the approved CMS Work Plan or Remedy Evaluation Plan and shall be generally consistent with guidance contained in the EPA document entitled, RCRA Corrective Action Plan (Final), OSWER Directive 9902.3-2A, May 1994, or the most recent version.

B. The CMS or Remedy Evaluation Report shall describe and discuss each remedial alternative or combination of alternatives evaluated, including any bench-scale or pilot tests conducted. The CMS or Remedy Evaluation Report shall include, but not be limited to, the following information:

1. Evaluation of the performance, reliability, ease of implementation, and potential impacts of each remedial alternative or combination of alternatives, including safety impacts, cross media impacts, overall carbon footprint, and control of exposure to any residual contamination;

2. Assessment of the effectiveness of each remedial alternative or combination of alternatives in terms of achieving adequate control of contaminant sources and cleanup of hazardous waste and/or hazardous constituents released from the SWMU(s) and AOC(s);

3. Estimation of the time required to begin and complete implementation of each remedial alternative or combination of alternatives, and an

estimate of the time required to meet the proposed remediation objectives contained in the CMS or Remedy Evaluation Report;

4. Estimation of the costs to implement, operate, monitor, and maintain each remedial alternative or combination of alternatives;

5. Recommendation of a preferred remedial alternative or combination of alternatives, and rationale for the proposed selection; and

6. Assessment of institutional requirements that may be needed (e.g., state or local permits), discussion of other environmental or public health requirements or institutional controls that may substantially affect implementing the preferred remedial alternative or combination of alternatives (e.g., local ordinances), and a draft of any facility-specific institutional controls proposed as part of the preferred remedial alternative or combination of alternatives (e.g., a draft environmental covenant containing specific activity and use limitations prepared pursuant to the Missouri Environmental Covenants Act, Sections 260.1000 through 260.1039, RSMo.).

C. The CMS or Remedy Evaluation Report shall contain information sufficient to facilitate the Department's development of a Statement of Basis in support of the final remedy decision-making process.

D. The Department shall review and approve the CMS or Remedy Evaluation Report according to the procedures described in General Permit Condition IV. Upon approval of the CMS or Remedy Evaluation Report, the Department will approve a final remedy as specified in Corrective Action Condition IX.

IX. Final Remedy Selection and Approval

A. Following the approval of the CMS or Remedy Evaluation Report, if required, as described in Corrective Action Condition VIII., the Department shall, in coordination with the Permittee, prepare a Statement of Basis summarizing the remedial alternatives evaluated by the Permittee and the Department's basis of support for the proposed final remedy.

B. Following preparation of the Statement of Basis, a permit modification shall be initiated according to 40 C.F.R. §§ 270.41 or 270.42(c), as applicable, to facilitate public review and comment on the Statement of Basis and proposed

final remedy, Department approval of a final remedy, and Permittee implementation of the approved final remedy. When, and if, required, the Permittee shall provide assurances of financial responsibility for the approved corrective action final remedy, according to 40 C.F.R. § 264.101(b), and as specified in the Financial Assurance Conditions of this Permit.

C. Upon completion of the public participation activities associated with the permit modification to implement the proposed final remedy, the Department shall approve a final remedy that shall:

1. Be protective of human health and the environment;

2. Control and/or eliminate the source(s) of contaminants so as to reduce or eliminate, to the maximum extent practicable, further contaminant releases, exposures, or migration that may pose a threat to human health and the environment; and

3. Meet all applicable federal, state, and local laws and regulations.

X. Activity and Use Limitations (AULs)

AULs are legal or physical restrictions or obligations with respect to the permitted facility property. AULs place a legal responsibility and physical restrictions or limitations on the use of, or access to, the permitted facility property. The following AULs, apply to the Permittee and the facility property subject to the jurisdiction of this Permit:

A. Soil or Other Environmental Media Disturbance at the Facility

1. Any planned construction, excavation, or maintenance and repair activities must be performed according to the approved Soil Excavation and Management Procedure, dated April 3, 2013, and revised May 20, 2013. The Department shall review and approve any revisions to the Soil Excavation and Management Procedure according to the procedures described in General Permit Condition IV.

2. The Permittee shall notify the Department at least 30 calendar days before any planned construction, excavation, or maintenance and repair activities that may disturb existing contamination at any SWMU, AOC, or other area subject to AULs. The Permittee shall, in

coordination with the owner(s) of any off-property areas impacted by soil and/or groundwater contamination originating from SWMUs and AOCs at the facility, assess the potential hazards associated with activities that potentially disturb or expose any contaminated environmental media and ensure that necessary precautions are taken, including protective and/or remedial measures, before performing the activity. In situations where advance notice is not feasible (i.e., emergency utility service or repair), notice shall occur as soon as practical. Future construction, excavation activities, or land use changes may necessitate further evaluation of conditions at SWMUs or AOCs having residual levels of contamination that exceed applicable regulatory thresholds.

B. Transfer of Interest in Permitted Property

1. The Permittee shall notify the Department at least 90 calendar days before transferring any interest in any portion of the permitted facility property. The Permittee shall comply with all requirements of 40 C.F.R. § 270.40, as related to any transfer of ownership or operational control of any portion of the permitted facility.

2. Any proposal by the Permittee to remove any parcel of the permitted facility property from the jurisdiction of this Permit shall require submitting a demonstration that all residual contamination on the portion of the property proposed for removal is protective of human health and the environment. Such demonstrations can be made by demonstrating the residual concentrations are below applicable regulatory standards consistent with any enforceable institutional and/or engineering controls contained in an environmental covenant for that portion of the property or that any residual contamination will be addressed in the future via implementing enforceable institutional controls.

3. Any parcel of the permitted facility property proposed to be removed from the jurisdiction of this Permit shall require a legal survey for that portion of the property, execution of an environmental covenant, if needed and such a covenant is not already in place at the time of the proposal, and successful completion of a Class 3 Permit Modification to remove the proposed portion of the property from the jurisdiction of this Permit, following the requirements of 40 C.F.R. § 270.42 and the

public notice and opportunity for comment requirements of 10 CSR 25-8.124.

C. Change in Use of Property

The Permittee shall notify the Department, according to 40 C.F.R. § 270.30(h), at least 30 calendar days before any proposed change in the use of the facility property, including any applications for building permits for work on the facility property or proposals for work that could potentially be affected by contamination from a SWMU or AOC, or affect compliance with the requirements of this Permit.

D. Deed Notice/Restrictions

On October 9, 2009, the Permittee and Holt County Recorder of Deeds signed an Easement, Notice, and Covenant running with the land for Landfill 1, Landfill 2, the soil borrow area, and associated access roads. The agreement grants the Department permissions to enter this property, set forth obligations to implement the Closure Plan or Post-Closure Plan as described in this Permit, and notify the Permittee of an opportunity to cure the property within a reasonable time.

E. Missouri Environmental Covenants Act

If, and when, the Department determines that implementing an Environmental Covenant is required at the facility, the Environmental Covenant shall be developed and executed that complies with the Missouri Environmental Covenants Act, Section 260.1000 through 260.1039, RSMo, and Departmental guidance provided to the Permittee. The following requirements shall apply to any Environmental Covenant required by this Permit.

1. The Permittee shall prepare and submit to the Department for review and approval, a draft Environmental Covenant to be filed in the property chain-of-title.

2. The draft Environmental Covenant shall include the following:

   a. A record of the type, location, and concentrations of hazardous wastes and hazardous constituents remaining in the subsurface

soils and/or groundwater exceeding applicable regulatory risk-based thresholds/standards;

b. Two figures illustrating the approximate boundaries of each SWMU for which the levels of contamination in the subsurface soils and/or groundwater exceed the applicable regulatory risk-based thresholds/standards. One figure shall illustrate soil contamination in relation to individual SWMUs or groups of SWMUs. The second figure shall illustrate groundwater contamination in relation to individual SWMUs or groups of SWMUs. The figures shall be to scale and indicate the location and dimensions of each SWMU with respect to key landmarks, such as major buildings, the permitted facility property line, etc. These figures shall also illustrate the location of any engineered controls implemented as part of the final remedy, which are to be restricted from disturbance;

c. Soil disturbance and groundwater use restrictions based on current land use; and

d. A provision to provide for proper operation and maintenance of any engineering controls implemented as part of the final remedy to prevent unacceptable human exposure to soils and groundwater contaminated with hazardous wastes or hazardous constituents in concentrations exceeding applicable regulatory risk-based thresholds/standards at the time of development of the draft Environmental Covenant. The engineering controls shall not be disturbed and shall remain in place and be effective until the Department provides written approval to alter, modify, eliminate, or otherwise cease operation and maintenance of such controls.

3. The Department shall review and approve the draft Environmental Covenant according to the procedures described in General Permit Condition IV.

4. Within 30 calendar days after the Department's approval of the draft Environmental Covenant, the Permittee shall execute the Environmental Covenant and shall submit the Environmental Covenant to all other relevant parties for signature.

5. Within 30 calendar days after all relevant parties have executed the Environmental Covenant for the permitted facility property, or for any off-property areas impacted by soil and/or groundwater contamination originating from SWMUs and AOCs on the facility property, the Permittee shall record the executed Environmental Covenant with the county recorder of deeds, the local zoning authority, or the authority with jurisdiction over local land use, according to state law. The executed Environmental Covenant shall be recorded in the chain-of-title for all affected properties, or on some other instrument which is normally examined during a title search, that will, in perpetuity, notify any potential purchaser of the environmental conditions of the property(ies).

6. Within 30 calendar days after recording the executed Environmental Covenant, the Permittee shall submit to the Department, a notarized statement certifying the executed Environmental Covenant has been recorded, including a copy of the Environmental Covenant showing the book/page/instrument number of recordation.

7. In the event that one or more parties (other than the Permittee) fail to timely execute the final Environmental Covenants for their portions of the permitted property after submittal to that party, the Department, with assistance from the Permittee, shall pursue all reasonable and necessary measures to obtain that party's signature. If any party does not timely execute the final Environmental Covenant for their portion of the permitted property following further discussion with the Department, the Department reserves the right to modify this Permit, according to 40 C.F.R. § 270.41, to name the party as an owner/operator (Permittee) and establish additional permit conditions for the portion of the permitted facility owned or operated by the party to be equivalent to the enforceable AULs provided for in the final Environmental Covenant(s).

8. The Environmental Covenant shall run with the land (permitted facility property) and shall be binding upon any future owners, operators, heirs, successors, lessees, or assigns and their authorized agents, employees, or persons acting under their direction or control. In the event of permit termination, the Permittee and/or facility owner shall cause any lease, grant, or other transfer of any interest in the facility property to include a provision expressly requiring the lessee

or transferee to comply with the Environmental Covenant conditions filed in the chain-of-title for the facility property.

9. In the event that future remediation on the permitted facility property, before or after permit termination, reduces contaminants to levels below applicable risk-based threshold/standards based on use of the property, the AULs, or portions thereof, contained in the Environmental Covenant may be rescinded and/or modified according to the provisions specified in the Environmental Covenant. This may include placing an additional document in the property chain-of-title indicating the Environmental Covenant, or portions thereof, have been rescinded and/or modified.

F. Environmental Covenant Provision Requirements Before Permit Termination

1. If the Permittee or facility owner desires to rescind or modify all or part of a previously executed Environmental Covenant, the Permittee shall submit a proposal to the Department at least 180 calendar days before the effective date of any proposed permit transfer or termination. This proposal shall contain a demonstration, signed by the Permittee, that evaluates the residual levels of contamination in comparison with then-current risk-based thresholds/standards. The Permittee shall demonstrate that residual contaminant levels have decreased to less than the applicable risk-based thresholds/standards in support of rescinding and/or modifying established AULs. The demonstration shall include, at a minimum, a summary of analytical data collected during any monitoring and/or confirmation sampling of contaminated media, a summary of all relevant historical data, accompanying narrative discussion, and any other relevant information that will ensure residual contaminant levels will be protective of human health and the environment if specific AULs are rescinded or modified.

2. If the Department determines, based on the demonstration required in Corrective Action Condition X.F.1., that the residual contamination levels present may still pose a threat to human health or the environment based on use of the property, the Department shall notify the Permittee, in writing, that the terms of the existing Environmental Covenant are still appropriate or that the Permittee shall prepare and submit for approval, a revised draft Environmental Covenant to

address the changed conditions at the facility. Within 60 calendar days after receiving the Department's notification, the Permittee shall prepare and submit a revised draft Environmental Covenant to the Department for review and approval. The revised Environmental Covenant shall include the following:

a. A record of the type, location, and concentrations of hazardous wastes and hazardous constituents expected to remain in the subsurface soils and/or groundwater that will exceed the currently applicable regulatory risk-based thresholds/standards at the time of proposed revision of the Environmental Covenant and/or termination of this Permit;

b. Two figures illustrating the boundary of each SWMU and AOC for which the levels of contamination in the subsurface soils and/or groundwater exceed the applicable regulatory risk-based thresholds/standards at that time. One figure shall illustrate soil contamination in relation to individual SWMUs or groups of SWMUs at the time of proposed revision of the Environmental Covenant and/or termination of this Permit. The second figure shall illustrate groundwater contamination in relation to individual SWMUs or groups of SWMUs at the time of proposed revision of the Environmental Covenant and/or termination of this Permit. The figures shall be to scale and indicate the location and dimensions of each SWMU with respect to key landmarks, such as major buildings, the permitted facility property boundaries, etc. These figures shall also illustrate the location of any engineered controls implemented as part of the final remedy, which are to be restricted from disturbance;

c. Groundwater use restrictions applicable at the time of proposed revision of the Environmental Covenant and/or termination of this Permit; and

d. A provision to provide for continued proper operation and maintenance of any engineering controls implemented as part of the final remedy to prevent human and/or environmental exposures to disposed wastes or soils and/or groundwater contaminated with hazardous wastes or hazardous constituents

in concentrations exceeding applicable regulatory risk-based thresholds/standards at the time of proposed revision of the Environmental Covenant and/or termination of this Permit. Any engineering controls shall not be disturbed and shall remain in place and be effective until the Department provides written approval to alter, modify, eliminate, or otherwise cease operation and maintenance of such controls.

3. If the Department determines the demonstration required in Corrective Action Condition X.F.1. is sufficient to support eliminating and/or modifying established AULs, the Department shall direct the Permittee to prepare and submit to the Department for review and approval, a revised draft Environmental Covenant to address the changed conditions at the facility.

4. The Department shall review and approve the revised draft Environmental Covenant according to the procedures described in Corrective Action Condition IV.

5. The Permittee shall record the approved revised Environmental Covenant as outlined in Corrective Action Condition X.F.4., and submit any related documentation to the Department according to the schedule outlined in Corrective Action Condition XII.A. The Permittee shall also comply with any additional Environmental Covenant conditions as outlined in Corrective Action Conditions X.B.1. through X.F.5., as appropriate.

XI. Annual Progress Reports

A. The Permittee shall prepare and submit to the Department, signed Annual Progress Reports summarizing all permitted corrective action activities undertaken during each calendar year. Each Annual Progress Report shall be due to the Department by March 1 of each calendar year for the previous calendar year. The Annual Progress Reports shall continue to be submitted until such time as the Permittee's corrective action activities (including any long-term operation, maintenance, and monitoring activities) are complete.

B. The Annual Progress Reports and Annual Groundwater Monitoring Reports, required by Special Permit Condition X., may be combined and submitted as a

single report. The Annual Progress Reports shall include the following information for the time period being reported:

1. A description of the work completed;

2. Summaries of all findings, including summaries of laboratory data;

3. Summaries of all problems or potential problems encountered during the report period and actions taken to rectify problems for the next reporting period;

4. Projected work for the next reporting period; and

5. Any instances of noncompliance with the corrective action requirements of this Permit not otherwise required to be reported elsewhere in this Permit.

C. If the Department determines further corrective action is required pursuant to Corrective Action Conditions II. through IX., the frequency of progress report submittals may increase. If an increase in reporting frequency is necessary, the Department will provide written notification of the new reporting frequency to the Permittee.

D. As part of any additional corrective action activities undertaken pursuant to this Permit, detailed technical information required to be submitted as part of ISMs, RFI and/or CMS work plans and reports need not be reproduced as part of the Permittee's Annual Progress Reports.

E. Copies of other reports (e.g., inspection reports), information, or data shall be made available to the Department and EPA upon request.

XII. Planned and Contingent Activities

A. The Permittee shall comply with the schedule for planned corrective action activities as specified in this Permit and summarized in Table 5.

B. The Permittee shall comply, as necessary, with the schedule(s) for contingent corrective action activities as specified in this Permit and summarized in Table 6.

XIII. Data

All uninterpreted data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained by the Permittee during the term of this Permit, including the term of any continued or reissued permits.

FINANCIAL ASSURANCE CONDITIONS

The Permittee shall comply with all applicable financial assurance requirements contained in the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act), Section 260.350, et seq., RSMo; 40 C.F.R. Part 264 Subparts H, 40 C.F.R. §§ 264.101, 270.30, 270.40, 270.42, and 270.51; and all provisions of this Permit for closure, post-closure care, and corrective action activities identified pursuant to the provisions of this Permit.

I. Cost Estimates

A. Closure, Post-Closure Care, and Corrective Action Cost Estimates

1. If, in the future, the Permittee submits a notice of intent to close the facility, or if a CMS or equivalent becomes necessary as part of the corrective action activities required by this Permit, within 90 calendar days of the notification of closure or final remedy approval, the Permittee shall submit, in compliance with 40 C.F.R. § 264.101, an updated, detailed written cost estimate, in current dollars, of the cost of hiring a third party to perform the closure, post-closure, and corrective action activities required by this Permit.

a. A third party is a party who:

(1) Is neither a parent nor a subsidiary of the Permittee and

(2) Does not share a common parent or subsidiary with the Permittee.

b. The cost estimates shall be certified by a professional engineer registered in Missouri and developed using appropriate cost estimating software.

c. The closure, post-closure care, and corrective action cost estimates shall account for the total cost of all work activities and related costs expected to continue until such time as final cleanup objectives are met and confirmed. This includes, but is not limited to, any long-term costs, such as:

(1) Final remedy operation, maintenance, and monitoring;

(2) Utilities, including electricity, water, and sewer;

(3) Decommissioning remediation equipment and plugging/abandoning monitoring wells;

(4) Real estate taxes on the property; and

(5) Departmental oversight cost reimbursement.

d. The post-closure care and corrective action cost estimates shall be based on a "rolling" 30 years' duration unless the CMS Report includes a detailed corrective measures alternative evaluation that supports a shorter time period, based on the projected length of time necessary to achieve applicable remediation objectives/standards. The Permittee may, at any time, submit to the Department for review and approval, a demonstration to adjust the post-closure care or corrective action cost estimates based on the estimated time remaining to achieve applicable remediation objectives/standards.

e. The post-closure care and corrective action cost estimates shall include a contingency cost allowance of 10 percent of the total cost of all post-closure and corrective action activities.

f. The cost estimates shall not include any salvage value that may be realized from the sale of wastes, facility structures or equipment, land, or other assets associated with the facility.

g. Discounting is not allowed for closure or post-closure care cost estimates. The regulations are silent on discounting for corrective action cost estimates, if and when needed. Discounting would allow a facility to provide less than the

amount of financial assurance required, based on the future value of the investment. The assumption is made that by the end of any post-closure care period, the full amount of financial assurance will be available based on the future value of money.

2. The Permittee shall submit each closure, post-closure care, and corrective action cost estimate to the Department for review and evaluation. If the cost estimate requires modification, the Department shall notify the Permittee, in writing, of the estimate's deficiencies and specify a due date for submitting a revised cost estimate for further evaluation and final written response.

3. The Permittee shall maintain, in the operating record, the most recent closure, post-closure care, and corrective action cost estimate that has received a final written response from the Department.

B. Revisions to Closure, Post-Closure Care, and Corrective Action Cost Estimates

1. Annual Adjustment for Inflation

The Permittee shall annually adjust the closure, post-closure care, and corrective action cost estimates, as applicable, for inflation until all activities required by this Permit are complete. The inflation adjustment shall be determined by using the procedures described in 40 C.F.R. § 264.142(b), except that the inflation factor should be derived from the most recent annual Implicit Price Deflator for the Gross Domestic Product, instead of the Gross National Product. The cost estimate is due within 60 calendar days before the anniversary date of the financial assurance instrument used to comply with this section. If the Permittee uses a financial test or corporate guarantee to demonstrate financial assurance, the cost estimate is due within 30 calendar days after the close of the guarantor's fiscal year.

2. The Permittee shall also adjust the closure, post-closure care, and corrective action cost estimate if:

a. The Permittee or the Department determines any additional closure, post-closure care, or corrective action activities are required; or

b. Any other conditions increase or decrease the estimated cost of the closure, post-closure care, or corrective action activities to be performed under this Permit.

3. If the Department determines a new cost estimate is required, the Department shall notify the Permittee, in writing, of this requirement. The revised cost estimate is due within 60 calendar days of the Permittee's determination that a revised cost estimate is necessary or the Department's written notification that a new cost estimate is required.

4. The Permittee shall submit each revised closure, post-closure care, and corrective action cost estimate to the Department for review and evaluation. If the revised cost estimate requires further modification, the Department shall notify the Permittee, in writing, of the estimate's deficiencies and specify a due date for submitting a new revised cost estimate for further evaluation and final written response.

II. Financial Assurance

In order to provide for the full and final completion of the closure, post-closure care, and corrective action activities required by this Permit, the Permittee shall establish and maintain financial assurance, for the benefit of the Department, in the amount at least equal to the most recent closure, post-closure care, and corrective action cost estimate that received a final written response from the Department. All financial assurance instruments provided pursuant to this Permit shall be satisfactory in form and substance as determined by the Department.

A. Certified Mail

The Permittee shall submit all required financial assurance instruments and related documents to the Department by certified mail.

B. Timeframes for Financial Assurance Instruments (other than Financial Test or Corporate Guarantee)

1. Within 30 calendar days after receiving the Department's final written response regarding the Permittee's cost estimate(s) pursuant to this Permit, the Permittee shall submit to the Department for review and evaluation, the draft financial assurance instrument(s) and related documents. This applies to all financial assurance instruments except the financial test or corporate guarantee. See Financial Assurance Condition II.C.

2. Within 10 calendar days after receiving the Department's final written response regarding the draft financial assurance instrument(s), the Permittee shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding. The final financial assurance instrument(s) shall be in a form identical to the draft financial assurance documents reviewed and responded to by the Department, including any changes resulting from that review.

3. Within 30 calendar days after receiving the Department's final written response regarding the draft financial assurance instrument(s), the Permittee shall ensure the issuing institution submits to the Department, all original executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding. The instruments or other documents shall be in a form identical to the financial assurance documents reviewed and responded to by the Department. Facsimiles or photocopies are not acceptable.

C. Timeframes for Financial Tests and Corporate Guarantees

1. Within 30 calendar days after receiving the Department's final written response regarding the Permittee's cost estimate(s) pursuant to this Permit, the Permittee shall submit to the Department for review and evaluation, all documentation necessary to demonstrate the Permittee satisfies the financial test criteria. See Financial Assurance Condition II.E.5.

2. The Permittee's financial assurance shall become effective immediately upon the Permittee receiving the Department's final written response regarding either the Permittee's cost estimate(s) or

the Permittee's demonstration that the Permittee satisfies the financial test criteria, whichever date is later.

D. Multiple Instruments

The Permittee may combine more than one mechanism generally described in Financial Assurance Condition II.E., to demonstrate financial assurance for the closure, post-closure care, and corrective action activities required by this Permit. As specified in 40 C.F.R. §§ 264.143(g) and 264.145(g), these mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. Using the foregoing instruments in combination with the financial test or corporate guarantee is not allowed. The Department reserves the right to limit the Permittee's choices to one or more of the instruments, on a case-by-case basis, in order to ensure the full and final completion of the closure, post-closure care, and corrective action activities required by this Permit.

E. Financial Assurance Instruments

The Permittee must choose from the mechanisms specified in 40 C.F.R. §§ 264.143, 264.145, and 264.146. The wording of the financial assurance documents shall meet the requirements of 40 C.F.R. § 264.151, except that deviation in wording to incorporate coverage for corrective action activities is allowed. All financial assurance instruments provided pursuant to this Permit shall be satisfactory in form and substance as determined by the Department.

1. Trust Fund

a. The trust fund shall be established for the benefit of the Department and administered by a trustee who has the authority to act as a trustee under federal or state law and whose trust operations are regulated and examined by a federal or state agency.

b. The trust agreement shall state that the trustee shall make payments from the fund, as the Department directs in writing, to:

(1) Reimburse the Permittee for expenditures made by the Permittee for closure, post-closure care, and corrective action activities performed according to this Permit; or

(2) Pay any other person whom the Department determines has performed or will perform the closure, post-closure care, and corrective action activities required by this Permit.

c. The trust agreement shall also state that the trustee shall not refund to the grantor any amounts from the fund until the Department notifies the trustee, in writing, that the closure, post-closure care, and corrective action activities performed according to this Permit have been completed to the Department's satisfaction.

2. Surety Bond

a. A surety bond shall unconditionally guarantee either:

(1) Payment, at the direction of the Department, into a standby trust fund that meets the requirements of Financial Assurance Condition II.E.1; or

(2) Performance of the closure, post-closure care, and corrective action activities required by this Permit. The Surety Company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal Bonds, as described in Circular 570 of the U.S. Department of the Treasury.

b. If the Permittee chooses to establish financial assurance by using a surety bond, the Permittee shall, at the same time, establish and maintain a standby trust fund. The standby trust fund shall meet the requirements of Financial Assurance Condition II.E.1. Funds from the surety bond shall be deposited into the standby trust fund if the Department directs the financial assurance provider to do so, pursuant to Financial Assurance Condition II.I.

3. Irrevocable Letter of Credit

   a. The letter of credit shall be issued by a financial institution that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

   b. If the Permittee chooses to establish financial assurance by using a letter of credit, the Permittee shall, at the same time, establish and maintain a standby trust fund. The standby trust fund shall meet the requirements of Financial Assurance Condition II.E.1. Funds from the letter of credit shall be deposited into the standby trust fund if the Department directs the financial assurance provider to do so, pursuant to Financial Assurance Condition II.I.

4. Policy of Insurance

   a. A policy of insurance shall provide the Department with rights, as a beneficiary, and be issued by an insurance carrier that has the authority to issue insurance policies in Missouri and whose insurance operations are regulated and examined by a federal or state agency.

   b. The insurance policy shall be issued for a face amount at least equal to the current closure, post-closure care, and corrective action cost estimate for which the facility has received a final written response from the Department, except that the face amount may exclude costs covered by another financial assurance instrument, as permitted in Financial Assurance Condition II.D.

   c. The insurance policy shall state that the insurer shall make payments up to an amount equal to the face amount of the policy, as the Department directs in writing, to:

      (1) Reimburse the Permittee for expenditures made by the Permittee for closure, post-closure care, and corrective action activities performed according to this Permit; or

(2) Pay any other person whom the Department determines has performed or will perform the closure, post-closure care, or corrective action activities required by this Permit.

d. The insurance policy shall also state that it may not be canceled, terminated, or non-renewed and the policy shall remain in full force and effect in the event that:

(1) The Permittee is named as a debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(2) The Department notifies the insurer of the Permittee's failure to perform, under Financial Assurance Condition II.I.

5. Financial Test or Corporate Guarantee

a. A Permittee may provide financial assurance through a demonstration that the Permittee satisfies the financial test requirements described in 40 C.F.R. §§ 264.143(f) and 264.145(f).

b. A Permittee's direct or indirect parent company may provide a corporate guarantee, executed in favor of the Department. Such guarantee shall state the company providing the guarantee shall perform the closure, post-closure care, and corrective action activities required by this Permit, or that the company shall establish a trust fund as allowed in Financial Assurance Condition II.E.1. Any company providing such a guarantee shall demonstrate, to the satisfaction of the Department, that it satisfies the financial test requirements described in 40 C.F.R. §§ 264.143(f) and 264.145(f).

c. The Permittee shall also comply with the applicable requirements of 40 C.F.R. §§ 264.151(f) and 264.151(h)(1), as related to these methods, unless otherwise provided in this Permit. This includes, but is not limited to:

(1) Initial submission of required financial reports and statements from the guarantors' chief financial officer and independent certified public accountant;

(2) Annual re-submission of such reports and statements within 90 calendar days after the close of each of the guarantor's fiscal year; and

(3) Notifying the Department, by certified mail, within 90 calendar days after the close of any of the guarantor's fiscal years in which any such guarantor no longer satisfies the financial test requirements.

d. The Department may, at any time, request additional information from the Permittee or corporate guarantor, including financial statements and accountant's reports. Any Department request for this information shall be in writing and shall specify a due date for submitting the information. The Permittee shall promptly provide the requested information to the Department.

e. References in 40 C.F.R. §§ 264.143(f) and 264.145(f) to "the sum of current closure and post-closure costs" and "the current plugging and abandonment cost estimates" and reference in 40 C.F.R. § 264.101(c) to "Assurances of financial responsibility for such corrective action shall be provided" shall mean "the sum of all environmental remediation obligations" guaranteed by such company or for which such company is otherwise financially obligated, in addition to the cost of the closure, post-closure care, and corrective action activities required by this Permit. This includes obligations under the Comprehensive Environmental Response, Compensation, and Liability Act; RCRA; Toxic Substances Control Act; Underground Injection Control Program; and any other state or tribal environmental obligation.

F. Automatic Renewal

All financial assurance instruments shall automatically renew each calendar year, at the time of their expiration, unless the financial assurance provider

notifies both the Permittee and Department, by certified mail, of a decision to cancel, terminate, or not renew a financial assurance instrument. The Permittee and Department shall receive such notification at least 120 calendar days before expiration, cancellation, or termination of the instrument. Under the terms of the financial assurance instrument, the 120 calendar days shall begin on the date both the Permittee and Department receive the notice.

1. Within 90 calendar days after receiving such notice by both the Permittee and Department, the Permittee shall provide alternate financial assurance and obtain a final written response from the Department regarding such alternate financial assurance.

2. If the Permittee fails to provide alternate financial assurance within 90 calendar days, the Department shall notify the financial assurance provider, in writing, before the instrument expires. The notice to the financial assurance provider shall instruct the financial assurance provider to immediately deposit any and all funds obligated under the financial assurance instrument into the standby trust fund, or a newly created trust fund acceptable to the Department.

G. Modifying Instruments

1. Inadequate Financial Assurance Instrument

a. If, at any time, the Department determines a financial assurance instrument(s) provided pursuant to this Permit is inadequate or no longer satisfies the requirements, the Department shall notify the Permittee, in writing. This applies whether there is an adjustment in the estimated cost of the closure, post-closure care, or corrective action activities required by this Permit, as independently determined by the Department, or for any other reason.

(1) Within 30 calendar days of receiving such notice, the Permittee shall submit a draft revised financial assurance instrument(s) and related documents to the Department for review and evaluation. The draft revised financial assurance instrument(s) and related documents shall address the inadequacies outlined in the Department’s notice.

(2) Within 10 calendar days after receiving the Department's final written response regarding the draft revised financial assurance instrument(s), the Permittee shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding. The final financial assurance instrument(s) shall be in a form identical to the draft revised financial assurance documents reviewed and responded to by the Department, including any changes resulting from that review.

(3) Within 30 calendar days after receiving the Department's final written response regarding the draft revised financial assurance instrument(s), the Permittee shall ensure the issuing institution submits to the Department, all original executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding. The instruments or other documents shall be in a form identical to the revised financial assurance documents reviewed and responded to by the Department. Facsimiles or photocopies are not acceptable.

b. If, at any time, the Permittee determines a financial assurance instrument provided pursuant to this Permit is inadequate or no longer satisfies the requirements described or incorporated herein, the Permittee shall notify the Department, in writing, within 10 calendar days of this determination. This applies whether due to an adjustment in the estimated cost of the closure, post-closure care, or corrective action activities required by this Permit or for any other reason.

2. Reduction in Amount of Financial Assurance

a. If the Permittee believes the estimated cost to complete the closure, post-closure care, and corrective action activities required by this Permit has diminished below the amount covered by the existing financial assurance provided under this

Permit, the Permittee may submit a written proposal to the Department to reduce the amount of the financial assurance provided under this Permit.

(1) The amount of financial assurance proposed shall be at least equal to the estimated cost of the remaining closure, post-closure care, and corrective action activities required by this Permit.

(2) The written proposal shall specify, at a minimum, the cost of the remaining closure, post-closure care, and corrective action activities to be performed and the basis upon which such cost was calculated (e.g., years remaining until established cleanup standards are expected to be met).

b. The Department shall notify the Permittee, in writing, regarding its evaluation of the revised financial assurance amount. The Permittee may reduce the financial assurance amount after receiving the Department's written response to the proposed revisions, but only according to, and to the extent permitted by, the Department's response. No change to the form or terms of any financial assurance provided under this Section is authorized, other than a reduction in amount.

3. Change of Form of Financial Assurance

a. If the Permittee wishes to change the form or terms of financial assurance, the Permittee may submit a written proposal to the Department for a revised or alternative form of financial assurance. The written proposal shall specify, at a minimum:

(1) The cost of the remaining closure, post-closure care, and corrective action activities to be performed and the basis upon which such cost was calculated; and

(2) The proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or

alternative form of financial assurance shall satisfy all requirements described or incorporated by reference in this Permit.

b. The Department shall notify the Permittee, in writing, of its decision regarding the revised or alternative form of financial assurance. Acceptance of the written proposal shall be made at the Department's sole discretion.

c. Within 30 calendar days after receiving the Department's final written response regarding the proposed revised or alternative financial assurance, the Permittee shall ensure the issuing institution submits to the Department, all original executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding. The instruments or other documents shall be in a form identical to the financial assurance documents reviewed and responded to by the Department. Facsimiles or photocopies are not acceptable.

d. The Department shall release, cancel, or terminate the prior existing financial assurance instruments only after the Permittee has submitted to the Department, all executed and/or otherwise finalized new financial assurance instruments or other required documents.

H. Obligation to Complete Closure, Post-Closure Care, and Corrective Action Activities

The Permittee's inability or failure to establish or maintain financial assurance for completing the closure, post-closure care, or corrective action activities required by this Permit in no way excuses performing any other requirements of this Permit, including, without limitation, the Permittee's obligation to complete all necessary closure, post-closure care, and corrective action activities in strict accordance with the terms of this Permit.

I. Performance Failure

1. In the event the Department determines the Permittee:

a. Has ceased implementing any of the closure, post-closure care, or corrective action activities required by this Permit; or

b. Is significantly or repeatedly deficient or late in performing the closure, post-closure care, or corrective action activities required by this Permit; or

c. Is implementing the closure, post-closure care, or corrective action activities required by this Permit in a manner that may cause an endangerment to human health or the environment;

the Department may issue, to both the Permittee and financial assurance provider, a written notice ("Performance Failure Notice") of the Permittee's failure to perform. The notice shall specify the grounds upon which the notice was issued and provide the Permittee 10 calendar days to remedy the circumstances.

2. If the Permittee fails to remedy the performance failure to the Department's satisfaction before the 10 calendar days' end, the Department shall have immediate access to, and benefit of, the financial assurance provided. The Department may, at any time thereafter, direct the financial assurance provider to immediately:

   a. Deposit any and all funds obligated under the financial assurance instrument into the standby trust fund, or a newly created trust fund acceptable to the Department; or

   b. Arrange for performance of the closure, post-closure care, or corrective action activities required by this Permit.

3. The Department shall notify the Permittee, in writing, if the Department is unable, after reasonable efforts, to secure the payment of funds from the financial assurance provider for performing the closure, post-closure care, or corrective action activities. Within 10 calendar days of receiving such notice, the Permittee shall provide cash to fund the standby trust fund, or a newly created trust fund acceptable to the Department.

a. The funds shall at least equal the cost of the remaining closure, post-closure care, and corrective action activities required by this Permit.

b. The deposit shall be made in immediately available funds and without setoff, counterclaim, or condition of any kind.

J. Release of Financial Assurance

1. After the Department and Permittee have mutually agreed that all closure, post-closure care, and corrective action activities required by this Permit are complete, the Permittee may submit a written request to the Department to release the Permittee from the requirement to maintain financial assurance.

2. The Department shall notify both the Permittee and financial assurance provider(s), in writing, if and when the Permittee is released from all financial assurance obligations under this Permit.

3. The Permittee shall not release, cancel, or terminate any financial assurance provided pursuant to this Permit, except as provided in Financial Assurance Condition II.G.2.

III. Liability Requirements

If the Permittee has not already done so as of the effective date of this Permit, within 90 calendar days after the effective date of this Permit, the Permittee shall establish third party liability coverage according to 40 C.F.R. § 264.147.

FACILITY SUBMISSION SUMMARY

Table 4 - Planned Submittal Requirements
Pursuant to this Permit and Schedule of Compliance

Submittal Requirements	Due Date*	Permit Condition
Two paper copies and one searchable electronic copy of the consolidated permit application	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.A.
Revised Part A permit application	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.B.
Certification that Permittee has read and understands all permit conditions in this Permit	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.C.
Check or money order for any outstanding engineering review costs	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.D.
Check or money order for each year this Permit is to be in effect beyond the first year	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.E.
Final SAP/QAPP	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.F.
Draft updates to financial assurance instrument(s)	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.G.
Contingency Procedures, as revised Integrated Events Response Plan	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.H.
Demonstration that Permittee satisfies financial assurance criteria	Within 30 calendar days after receiving Department's final written response regarding updated closure cost estimate.	Schedule of Compliance Item II.
Execute updated financial assurance instrument reflecting updated cost estimate	Within 10 calendar days after receiving Department's final written response regarding draft financial assurance instrument.	Schedule of Compliance Item III.

Submittal Requirements	Due Date*	Permit Condition
Original executed financial assurance instruments and related documents	Within 30 calendar days after receiving Department's final written response regarding draft financial assurance instrument.	Schedule of Compliance Item IV.
A Plan for the safe management of landfilled material	Within 90 calendar days prior to the Permittee needing to utilize Phase III, of Landfill 2.	Schedule of Compliance Item VI.
Annual Groundwater Monitoring Report	March 1 of each calendar year.	Special Permit Condition X.
Annual post-closure care and corrective action cost estimate inflation update	Within 60 calendar days before the anniversary date of establishing the financial assurance instrument or within 30 calendar days of the end of the provider's fiscal year if a financial test or corporate guarantee is used.	Financial Assurance Condition I.B.1.
Certification of Completion of Post-Closure Care	Within 60 calendar days after completing post-closure care period.	Special Permit Condition VIII.D.
Permit Renewal Application	At least 24 months before expiration date of this Permit.	Standard Permit Condition II.

*Extensions may be requested and approved by the Department for cause without modifying this Permit.

Table 5 - Planned Corrective Action Submittal Requirements Pursuant to the Corrective Action Conditions of this Permit

Planned Submittal Requirements	Due Date	Corrective Action Condition
RCRA Facility Investigation (RFI) Work Plan	Within 180 calendar days after receiving Department approval of the site specific Background Study.	V.C.
RCRA Facility Investigation (RFI) Report	According to the schedule in the approved RFI Work Plan.	VI.A.
Corrective Measures Study (CMS) or Remedy Evaluation Work Plan	Within 45 calendar days after receiving Department notification that a work plan is required.	VII.A.
Corrective Measures Study (CMS) or Remedy Evaluation Report	According to the schedule in the approved CMS Work Plan.	VIII.A.
Annual Progress Reports	By March 1 of each calendar year (may be combined with March 1 Groundwater Monitoring Reports).	XI.
Annual Groundwater Monitoring Reports	March 1 of each calendar year.	XVII.A. and C.

Table 6 - Contingent Corrective Action Submittal Requirements Pursuant to the Corrective Action Conditions of this Permit

Contingent Submittal Requirements	Due Date	Corrective Action Condition
Written notification of newly identified SWMU(s) and AOC(s)	No later than 15 calendar days after discovery.	II.A.
SWMU/AOC Assessment Work Plan	Within 30 calendar days after notice by the Department that a work plan is required.	II.B.
SWMU/AOC Assessment Report	According to the schedule in the approved SWMU/AOC Assessment Work Plan.	II.D.
Written notification of newly identified releases from previously identified SWMU(s) and AOC(s)	No later than 15 calendar days after discovery.	III.A.
Newly Identified Release Work Plan	Within 30 calendar days after notice by the Department that a work plan is required.	III.B.
Newly Identified Release Report	According to the schedule in the approved Newly Identified Release Work Plan.	III.D.
Notification of interim/ stabilization measures	Within 24 hours after discovery of need for stabilization.	IV.A.1.
Notification of interim/ stabilization measures not effective	Within 10 calendar days after determination.	IV.A.3.
Certification of Final Remedy Construction	Within 60 calendar days after final remedy construction.	I.X.C.
Soil or Other Media Disturbance Notification	At least 30 calendar days before any planned activities at any area subject to AULs.	X.A.

Contingent Submittal Requirements	Due Date	Corrective Action Condition
Transfer of Interest in Permitted Property Notification	At least 90 calendar days before transferring any interest in any portion of permitted property.	X.B.
Change in Use of Property Notification	At least 30 calendar days before any proposed change in use of property.	X.C.

Figure 1 – Facility Location

Figure not available due to size.
Please see hard copy or separate electronic file online at
https://dnr.mo.gov/env/hwp/permits/mod030712822/20180910-figure1

Figure 2 – Facility Property Boundaries

Figure not available due to size.
Please see hard copy or separate electronic file online at
https://dnr.mo.gov/env/hwp/permits/mod030712822/20190327-figure2

Figure 3 – Location of SWMUs and AOCs at the Facility

Figure not available due to size.
Please see hard copy or separate electronic file online at
https://dnr.mo.gov/env/hwp/permits/mod030712822/20011001-figure3

Figure 4 – Permitted Hazardous Waste Storage, Treatment and Containment Building Areas

Figure not available due to size.
Please see hard copy or separate electronic file online at
https://dnr.mo.gov/env/hwp/permits/mod030712822/20180910figure4

Figure 5 – Location of Landfill 1 and Landfill 2

Figure not available due to size.
Please see hard copy or separate electronic file online at
https://dnr.mo.gov/env/hwp/permits/mod030712822/20070405-figure5