

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES



**MISSOURI HAZARDOUS WASTE MANAGEMENT FACILITY
PART I PERMIT**

PERMIT NUMBER: MOR000556985

PERMITTEE

Owner and Operator: Trioxy, Incorporated
3651 West Industrial Park Drive
Louisiana, MO 63353

FACILITY LOCATION

Trioxy, Incorporated
3651 West Industrial Park Drive
Louisiana, Missouri 63353
Pike County
North Latitude – 39°25'28"
West Longitude – 91°04'30"

FACILITY DESCRIPTION

Trioxy, Incorporated (Trioxy) is a commercial hazardous waste treatment and storage facility. Trioxy accepts alcohols, healthcare wastes, solvents, characteristic hazardous wastes, as well as various F-, K-, P-, and U-listed hazardous wastes. Trioxy conducts disinfection and grinding of infectious health care wastes that may be mixed with hazardous wastes. The disinfected/treated/sized wastes are then blended with liquid hazardous waste in tanker trucks. The blended wastes are prepared for use as an alternative fuel at other appropriately permitted hazardous waste facilities. The infectious aspect of the healthcare waste is permitted through a Solid Waste

Program construction permit, issued May 25, 2017. The general facility location is shown in Figure 1. The facility property boundaries are shown in Figure 2.

PERMITTED ACTIVITIES

This Permit allows Trioxo to operate a hazardous waste treatment and storage facility and requires the conditions contained in this Permit to be complied with throughout the operation and future closure of the facility. This Permit also contains contingent corrective action conditions to address any newly-identified releases to the environment from newly-identified Solid Waste Management Units and Areas of Concern, as necessary and appropriate.

EFFECTIVE DATES OF PERMIT: May 11, 2018 to May 10, 2028

May 11, 2018

[Original signed by Edward B. Galbraith]

Date

Edward B. Galbraith, Director
DIVISION OF ENVIRONMENTAL QUALITY

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	5
DEFINITIONS.....	9
SCHEDULE OF COMPLIANCE	11
SUBMITTAL OF REQUIRED INFORMATION	13
STANDARD PERMIT CONDITION	14
GENERAL PERMIT CONDITIONS.....	14
SPECIAL PERMIT CONDITIONS	17
I. 100-Year Floodplain Requirements.....	17
II. Storage in Containers.....	17
III. Miscellaneous Treatment Units	24
IV. Off-Property Requirements.....	33
V. Waste Minimization.....	35
VI. Air Emission Standards for Tanks and Containers	35
VII. Additional Conditions.....	35
CORRECTIVE ACTION CONDITIONS	38
I. Identification of SWMUs and AOCs.....	38
II. Notification Requirements for, and Assessment of, Newly-Identified SWMUs and AOCs.....	38
III. Notification Requirements for, and Assessment of, Newly-Identified Releases from Previously-Identified SWMUs and AOCs	41
IV. Interim/Stabilization Measures	43
V. RCRA Facility Investigation (RFI) Work Plan	44
VI. RCRA Facility Investigation (RFI) Report.....	46
VII. Corrective Measures Study (CMS) Work Plan.....	48
VIII. Corrective Measures Study (CMS) Report.....	50
IX. Final Remedy Selection and Approval	51
X. Planned and Contingent Activities.....	52
XI. Data.....	52

FINANCIAL ASSURANCE CONDITIONS..... 53
 I. Cost Estimates..... 53
 II. Financial Assurance..... 55

FACILITY SUBMISSION SUMMARY 66

FIGURES

Figure 1 – Facility Location..... 70
Figure 2 – Facility Property Boundaries..... 71
Figure 3 – Floor Plan of the Facility..... 72

TABLES

Table 1 - Container Storage Area (CSA) Maximum Volumes..... 18
Table 2 - Planned Submittal Requirements Pursuant to this Permit and
 Schedule of Compliance..... 66
Table 3 - Contingent Corrective Action Submittal Requirements Pursuant to the
 Corrective Action Conditions of this Permit..... 68

INTRODUCTION

After public notice, according to Code of State Regulations 10 CSR 25-8.124, and review of Trioxy Incorporated's Missouri Hazardous Waste Management Facility Permit Application (hereafter referred to as the application), the Missouri Department of Natural Resources (hereafter referred to as the Department) has determined the application conforms to the provisions of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and regulations promulgated thereunder by the U.S. Environmental Protection Agency (hereafter referred to as EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations) and the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act), Section 260.350, et seq., of the Missouri Revised Statutes (RSMo). Pursuant to Section 260.375.13, RSMo and the Solid Waste Disposal Act, the Department hereby approves the application and issues Permit Number MOR000556985 to Trioxy, Incorporated, as the facility owner and operator, (hereafter referred to as the Permittee) for hazardous waste treatment and storage, as described in the 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. Applicable regulations are found in 40 CFR Parts 260 through 264, 266, 268, and 270, and 10 CSR 25-7, as specified in this Permit. The Department is issuing this Missouri Hazardous Waste Management Facility (MHWMF) Part I Permit (hereafter referred to as this Permit) under state authority.

All citations to federal regulations throughout this Permit are for the sake of convenient reference. The federal regulations are adopted by reference in 10 CSR 25. In instances where state regulations are more stringent, the appropriate state reference is given and shall apply.

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.

All permit application information shall be 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 review by the public at the Department's office in Jefferson City, Missouri.

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 Director of the Department's Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176.

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

- Missouri Hazardous Waste Management Facility Permit Application, dated December 22, 2016, with revisions dated December 27, 2016, and January 31, 2017.
- Additional technical information, dated August 8, 2017, and March 29, 2018.

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.

Any inaccuracies found in information submitted by the Permittee may be grounds for the termination, revocation and reissuance, or modification of this Permit, according to 10 CSR 25-7.270(1), incorporating 40 CFR Part 270 Subpart D, 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 10 CSR 25-7.270(1), incorporating 40 CFR Part 270 Subpart D.

Construction and operation of this hazardous waste facility and any future required corrective action program activities shall be according to the provisions of this Permit, the Missouri Hazardous Waste Management Law (Sections 260.350 to 260.434, RSMo), the rules and regulations promulgated thereunder [Code of State Regulations, Title 10, Division 25 (10 CSR 25)] as effective on the date of this Permit, all final engineering plans, petitions, specifications, and operating procedures that were submitted to the Department during the permit application review process, which are included in the final version of the 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 final engineering plans, specifications, and operating procedures, 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.

This Permit is for hazardous waste treatment and storage activities and is issued only to the Permittee named above. This Permit is issued for a period of ten years and expires at midnight on May 10, 2028. This Permit is subject to review and modification by the Department, according to Section 260.395.12, RSMo. According to 10 CSR 25-7.270(1), incorporating 40 CFR 270.51, if a timely and complete application is submitted, the conditions of this Permit will continue in force until the effective date or denial of a new permit.

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 the state in lieu of EPA are incorporated into this Permit and are under state authority.

10 CSR 25-7.264(1), incorporating 40 CFR 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.

10 CSR 25-7.264(1), incorporating 40 CFR 264.101(b), requires that permits issued under the 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.

10 CSR 25-7.264(1), incorporating 40 CFR 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 action. 40 CFR 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, according to 40 CFR 264.101.

10 CSR 25-7.264(1), incorporating 40 CFR 270.32(b)(2), and Section 260.395.12, RSMo, require that each permit issued under that section contain terms and conditions as the Department determines necessary to protect human health and the environment.

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, Dam and Reservoir Safety Program, Geological Survey Program, Hazardous Waste Program, Land Reclamation Program, Solid Waste Management Program, and Water Protection Program. Failure to comply with these environmental laws and regulations may, in certain circumstances, result in the suspension or revocation of 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 CFR 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.

“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. Investigation and/or remediation of AOCs may be required pursuant to Section 260.395, RSMo, and 10 CSR 25-7.270(1), incorporating 40 CFR 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 10 CSR 25-7.264(1), incorporating 40 CFR 264.101, and as specified in this Permit.

“Hazardous constituent” means any chemical compound listed in 10 CSR 25-4.261(1), incorporating 40 CFR Part 261, Appendix VIII.

“Hazardous waste” means any waste, or combination of wastes, as defined by or listed in 10 CSR 25-4, which, because of its quantity, concentration, physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or which may pose a threat to the health of humans or other living organisms.

“Interim/Stabilization Measures (ISMs)” means actions to control or abate threats to human health and/or the environment from releases at RCRA facilities and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

“Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes or hazardous constituents into the environment (including the abandonment or discarding of 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 the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

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 a certification by the Permittee that the Permittee has read this Permit in its entirety and understands all permit conditions contained in this Permit.
 - C. Submit to the Department, to the attention of the Hazardous Waste Program, Permits Section, a check or money order payable to “State of Missouri” for any outstanding engineering review costs.
 - D. Submit to the Department, to the attention of the Hazardous Waste Program, Permits Section, a check or money order payable to “State of Missouri” for \$1000 for each year this Permit is to be in effect beyond the first year. This Permit is effective for ten years. Since the Permittee submitted a \$1000 deposit with the permit application, the remaining balance to be submitted by the Permittee is \$9000.00. An invoice is included with this Permit.
 - E. Submit to the Department for approval, an updated closure plan and closure cost estimate, in accordance with 10 CSR 25-7.264(1), incorporating 40 CFR 264.112.
- II. Within 60 calendar days after receiving the Department’s final written response regarding review of the updated closure cost estimate, the Permittee shall submit to the Department, all documentation necessary to demonstrate the Permittee satisfies the financial assurance criteria in 10 CSR 25-7.264(1), incorporating 40 CFR 264.143.
- III. Within 30 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 maintain financial assurance for closure until such time as the Department accepts the closure certification report and notifies the Permittee, in writing, that the financial assurance mechanism for closure may be terminated.
- VI. The Permittee shall comply, as necessary, with all contingent corrective action requirements of this Permit, as specified in the Corrective Action Conditions and as summarized in Table 3.

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, and plans/specifications required under the terms of this Permit to:

Chief, Permits Section
Missouri Department of Natural Resources
Hazardous Waste 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 in accordance with General Permit Condition V.

STANDARD PERMIT CONDITION

- 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 25-7 and 10 CSR 25-8; 10 CSR 25-7.264(1), incorporating and modifying 40 CFR Part 264 Subpart H and 40 CFR 264.101; and 10 CSR 25-7.270(1), incorporating 40 CFR 270.10, 40 CFR 270.30, 40 CFR 270.40, 40 CFR 270.42, and 40 CFR 270.51.
- II. In accordance with 10 CSR 25-7.270(1), incorporating 40 CFR 270.10(h)(1) and 40 CFR 270.32, the Permittee shall submit a permit renewal application to the Department at least 18 months prior to the expiration date of this Permit, unless the Director allows a later date.

GENERAL PERMIT CONDITIONS

- I. The Permittee shall comply with the applicable requirements described in 40 CFR Part 61 Subpart FF; 10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subparts B, C, D, E, G, H, I, X, BB, CC and DD; 10 CSR 25-7.268(1), incorporating 40 CFR Part 268; 10 CSR 25-7.270(1), incorporating 40 CFR Part 270; 10 CSR 25-16.273(1), incorporating 40 CFR Part 273; and 10 CSR 25-11.279(1), incorporating 40 CFR Part 279.
- 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 1-800-424-8802.

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 10 CSR 25-7.264(1), incorporating 40 CFR 264.56(j), and be provided to the addressees listed in "Submittal of Required Information" provision.
- III. This Permit does not authorize the management of any non-hazardous solid waste outside the hazardous waste management processes and units described herein. Handling non-hazardous solid waste outside the requirements of this Permit is subject to regulation under Missouri's Solid Waste Management Law and regulations and is not authorized by this Permit. Infectious wastes are handled at the facility in accordance with a separate permit issued by the Department's Solid Waste

Management Program. When wastes are both infectious and hazardous (comingled) the conditions of both this Permit and the Permittee's Solid Waste Management Permit apply.

IV. Review and Approval Procedures

- A. Following submission of any plan or report submitted by the Permittee pertaining to any test plans to conduct sampling and analysis of the hazardous waste, residues, emissions, plant sampling, odor testing, or for corrective action activities, 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 submittal of a revised plan, report, or associated activity schedule.
- B. Any plan or report submitted for closure or corrective action activities shall be reviewed and responded to by the Department, according to the procedures described in the Special or Corrective Action Conditions of this Permit.
- C. Financial assurance cost estimates and draft financial assurance mechanisms submitted for closure 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.
- D. 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.
- E. 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 10 CSR 25-2.020, and 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 (hard copy letter or e-mail are acceptable) to the

Department. 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 to submit the scheduled document or complete the scheduled activity 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 has 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 [10 CSR 25-7.264(1), incorporating 40 CFR 264.18(b)]

The Permittee submitted information, as required in 10 CSR 25-7.270(1), incorporating 40 CFR 270.14(b)(11)(iii) and 40 CFR 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 [10 CSR 25-7.264(1), incorporating 40 CFR 264 Subpart I, and 10 CSR 25-7.264(2)(I)]

Two container storage areas are permitted at this facility. These areas are located as shown on Figure 3, and are subject to the requirements of 10 CSR 25-7.264(1), incorporating 40 CFR 264 Subpart I, and the requirements of 10 CSR 25-7.264(2)(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. 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. The quantity of any non-hazardous waste regulated materials stored in permitted storage areas shall be counted towards the total maximum volume quantity of waste permitted to be stored in the storage area established in Special Permit Condition II.B. All stored wastes are subject to the terms of this Permit.

Any rejected wastes, as defined in the Waste Analysis Plan of the approved permit application, must be stored in the designated rejection area at the facility and must be shipped off-site to an appropriate destination facility as soon as reasonably possible, but in any case no longer than ten calendar days after receipt of the rejected waste(s).

B. Hazardous Waste Quantities

The maximum quantity of hazardous wastes that may be stored in each permitted container storage area is specified in Table 1:

Table 1 - Container Storage Area (CSA) Maximum Volumes

Identification	Maximum Volume
Container Storage Area #1	160 cubic yards, 32,314 gallons, or 80 pallet spaces.
Blend Building Storage Area #1	18,000 gallons

1. Container Storage Area #1

The maximum quantity of hazardous wastes that may be stored at any time is 160 cubic yards of material; 32,314 gallons; or 80 pallet spaces of hazardous waste. If pallet spaces are stacked (2) two-high, then 160 pallets may be stored. The Permittee may store solid materials and free liquids in containers in this area, as described in this Permit and the approved permit application.

2. Blend Building Storage Area #1

The maximum quantity of hazardous wastes that may be stored at any time is a total of 18,000 gallons (i.e., three tankers at 6,000 gallons each). The Permittee may store free liquids in tankers, including blended material, in this area, as described in this Permit and the approved permit application.

3. Container Storage Area #1 and Blend Building Storage Area #1

The Permittee shall not operate Container Storage Area #1 or Blend Building Storage Area #1 for hazardous waste storage until:

- a. The Permittee has submitted to the Director, by certified mail or hand delivery, a letter signed by the Permittee and a professional engineer registered in Missouri stating that the unit has been constructed or modified according to this Permit and the approved permit application. The Permittee shall

request authorization to operate according to 10 CSR 25-7.270(1), incorporating 40 CFR 270.30(1)(2);

The Permittee shall also include with this submittal the “as-built” design drawings and specifications for each container storage area. These drawings and specifications shall be certified by a professional engineer registered in Missouri.

- b. The Director has inspected the newly constructed Container Storage Area #1 and Blend Building Storage Area #1 and finds they are in compliance with the conditions of this Permit; or

Within 15 calendar days of the date of submission of the letter in paragraph 3.a. of this section, the Permittee has not received notice from the Director of his or her intent to inspect, prior inspection is waived, and the Permittee may begin using Container Storage Area #1 and Blend Building Storage Area #1.

C. Condition of Containers [10 CSR 25-7.264(1), incorporating 40 CFR 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 that will be shipped off-site shall be labeled and marked according to 10 CSR 25-5.262(2)(C).

D. Compatibility of Waste with Containers [10 CSR 25-7.264(1) incorporating 40 CFR 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 hazardous waste is not impaired.

- E. Management of Containers [10 CSR 25-7.264(2)(I) and 10 CSR 25-7.264(1), incorporating 40 CFR 264.173 and 40 CFR 270.32]
1. A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove hazardous 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 the inspection of 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 the inspection of 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 ten feet.
 - c. Class I flammable liquids, as defined in the National Fire Protection Association’s “Flammable and Combustible Liquids Code” (NFPA 30, as revised 1996), shall be stacked no higher than five feet.
 - d. Class II combustible liquids, as defined in the National Fire Protection Association’s “Flammable and Combustible Liquids Code” (NFPA 30, as revised 1996), shall be stacked no higher than ten feet.
4. A minimum of four feet of aisle space shall be maintained between rows of adjacent containers to allow for inspection of each container. All containers shall be accessible from an aisle. Double rows can be utilized. 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 the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation.
- F. Inspections [10 CSR 25-7.264(1), incorporating 40 CFR 264.174]
1. For each day of operation, and according to the schedules in the approved permit application, the Permittee shall inspect areas where containers are stored in Container Storage Area #1, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.
 2. The Blend Building Storage Area #1 shall be inspected daily, during periods of operation, according to the approved permit application. The inspection shall include looking for leakage from the tankers and accumulation of liquid under the tankers. Any indication of leakage shall be properly managed and the affected tanker shall be unloaded immediately or as soon as reasonably possible.

3. At least weekly, the Permittee shall inspect the floor in the permitted container storage areas, around the containers and tankers, looking for cracks. At least annually, the Permittee shall inspect the entire floor of the permitted container storage areas for cracks, including the areas under the containers and tankers. The annual inspection requirement may be met by partial inspections of the floor during movement of containers/tankers in and out of the container storage areas. If cracks are found in the floor, repairs shall begin within ten calendar days of identifying the cracks. Inspection results and any repairs shall be recorded in the facility operating record.

G. Containment [10 CSR 25-7.264(1), incorporating 40 CFR 264.175]

1. The Permittee shall design and operate containment systems for Container Storage Area #1 and Blend Building Storage Area #1, 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 ten 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 hazardous 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 overflow of the collection system.

H. Temporary Management [10 CSR 25-7.270(1), incorporating 40 CFR 270.32(b)(2)]

A container holding hazardous waste shall not be temporarily managed in an area of the facility not addressed by this Permit for a period that exceeds 24 consecutive hours, unless the area is being operated as a less than 90-day hazardous waste generator storage area.

I. Special Requirements for Ignitable or Reactive Waste [10 CSR 25-7.264(1), incorporating 40 CFR 264.176 and 10 CSR 25-7.264(2)(I)]

- 1. The Permittee shall maintain the facility, as illustrated in the approved permit application, in a manner that complies with 10 CSR 25-7.264(2)(I).
- 2. Containers holding ignitable or reactive hazardous waste shall be located at least 50 feet from the facility's property line.

J. Special Requirements for Incompatible Waste [10 CSR 25-7.264(1), incorporating 40 CFR 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 10 CSR 25-7.264(1), incorporating 40 CFR 264.17(b).
- 2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible hazardous waste or material.
- 3. The Permittee shall separate by device (i.e., a dike or other physical means) containers of incompatible hazardous waste or materials. No incompatible hazardous 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.

K. Closure [10 CSR 25-7.264(1), incorporating 40 CFR 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 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, in accordance with 10 CSR 25-270(1), incorporating 40 CFR 270.42.

III. Miscellaneous Treatment Units [10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subpart X]

Three miscellaneous treatment units will be permitted and operated, which include the Ozone Treatment Unit, Container Wash Unit, and Fuel Blending Unit. These units are located as shown on Figure 3 and are subject to the standards for miscellaneous physical and chemical treatment units in 10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subpart X.

The term “miscellaneous unit” is used to address the devices and processes to be located inside the facility building identified as the following:

A. Subpart X Miscellaneous Treatment Units

1. Ozone Treatment Unit

The Ozone Treatment Unit processes will disinfect and size combined healthcare and hazardous waste. The Ozone Treatment Unit is an enclosed system comprised of a slow-speed shredder followed by a treatment bin where the combined healthcare/hazardous waste is exposed to high concentrations of ozone gas to disinfect it. When disinfection of the combined healthcare/hazardous waste is complete, it is conveyed to the fuel blending unit.

2. Container Wash Unit

The Container Wash Unit process will clean reusable medical waste containers, which may have contained combined healthcare and hazardous waste. The Container Wash Unit utilizes a conveyor belt

system to wash, sanitize, and dry reusable medical waste containers used for combined healthcare and hazardous wastes.

3. Fuel Blending Unit

The Fuel Blending Unit process will blend disinfected healthcare and hazardous wastes with liquid hazardous wastes to create a fuel with desirable British Thermal Unit (BTU) content to be used as a supplemental fuel at facilities that are appropriately permitted to accept such fuel. The Fuel Blending Unit consists of pumps, a blender, an inline grinder, and a piping network to transport fuel blends and fuel blend components to and from tankers parked in Blend Building Storage Area #1.

B. Waste Identification [10 CSR 25-7.264(1), incorporating 40 CFR 264.601]

The Permittee may treat only the hazardous wastes identified in Part A of the approved permit application. All treatment processes performed in accordance with this Permit shall be subject to the terms of Special Permit Condition III., and shall only be performed inside the facility building.

C. Waste Quantities [10 CSR 25-7.264(1), incorporating 40 CFR 264.601]

1. Ozone Treatment Unit

- a. The Permittee shall treat only the amount of hazardous waste that will be blended into fuel. At any given time, the Permittee may only treat a total volume of hazardous waste that is equivalent to two U.S. tons per hour.
- b. Individual charges of hazardous waste fed to the unit shall not be temporarily managed in the unit for more than 24 consecutive hours. Hazardous waste shall be returned to a permitted storage unit or sent on to fuel blending before exceeding the 24-hour temporary management limit.

2. Container Wash Unit

- a. The process design capacity for the container wash unit is 12,000 gallons per hour.

- b. The Permittee shall ensure that each medical or dual healthcare/hazardous waste container is emptied to the maximum extent possible at the ozone treatment unit before bringing the container to the container wash unit. The containers must be washed within 24 hours.
 - c. If a container or liner directly held an acutely hazardous waste, the container or liner must be triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing intermediate. If a disposable liner is used it must be disposed of or treated as acutely hazardous waste.
 - d. Used filters from the container wash unit will be processed in the ozone treatment unit. When wash water is spent, it will be pumped to a tanker in the Blend Building Storage Area #1 and used in the fuel blending process.
3. Fuel Blending Unit
- a. The Permittee shall treat only the amount of hazardous waste that will be used to blend fuel. At any given time, the Permittee may treat no more than a total volume of hazardous waste that is equivalent to 24,000 gallons per hour.
 - b. The Permittee shall blend hazardous waste only inside the Fuel Blending Unit. Hazardous waste shall not be held in the Fuel Blending Unit for more than 24 hours. Hazardous waste shall be returned to a permitted storage area before exceeding the 24-hour temporary management storage limit.

D. Control of Fugitive Emissions

The Permittee shall operate, inspect, and maintain all systems and equipment necessary to prevent fugitive emissions from the facility building. The Permittee shall not operate the treatment units if visible emissions are evident. The Permittee shall operate the entire facility building and the activated carbon system according to "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure," under 40 CFR § 52.741, Appendix B. The Permittee shall install and monitor daily, a vacuum gage on the inlet ducting fan required under Procedure T. A daily record in the

operating log must document that the system is operated under negative pressure.

E. Containment [10 CSR 25-7.264(1), incorporating 40 CFR 264.601 and 40 CFR 264.175]

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 ten 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 III.E.3., to contain any run-on that might enter the system.
5. Spilled or leaked hazardous 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 overflow of the collection system and provide for protection of on-site personnel.

F. Operating Requirements [10 CSR 25-7.264(1), incorporating 40 CFR 264.601]

1. The Permittee shall not place hazardous waste or treatment reagents in the treatment units 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 devices that are specified in the approved permit application for treatment of hazardous waste.
4. The Permittee shall operate all miscellaneous treatment units only according to the manufacturer's applicable operating manuals and as described in the approved permit application.
5. At all times the Ozone Treatment Unit and Fuel Blending Unit are operating, the air emissions control equipment and nitrogen blanketing system shall be operating and fully functional.

G. 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 and limits and operating parameters specified in this Permit, including any parameters used in calculations.

H. Response to Leaks or Spills [10 CSR 25-7.264(1), incorporating 40 CFR 264.601 and 40 CFR 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 hazardous waste, and inspect the system to determine the cause of the release.
 - b. Remove hazardous waste from the system within 24 hours of the detection of 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.

If the collected material is a hazardous waste, it must be managed in accordance with all applicable requirements of 40 CFR 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 or surface water;
 - (2) Remove and properly dispose of any visible contamination of the soil or surface water; and
 - (3) Determine the extent of contamination to the soil or surface water.
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 hazardous 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 prior to 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 CFR 264.192 and 40 CFR 264.193.

3. For all major repairs to eliminate leaks or restore the integrity of the treatment system, the Permittee must obtain a certification by a qualified professional engineer registered in Missouri, prior to returning the system to service. The certification must state that the repaired system is capable of handling hazardous wastes permitted for treatment within the unit without release for the intended life of the system.
- I. Inspection Schedules and Procedures [10 CSR 25-7.264(1), incorporating 40 CFR 264.602]
1. The Permittee shall inspect the treatment systems according to the Inspection Schedule specified in Appendix 4-1 of the approved permit application.
 2. The Permittee shall inspect once each operating day:
 - a. All visible portions of each of the units to detect corrosion, fugitive emissions, or releases of hazardous waste or treatment residues;
 - b. Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges) to ensure that each unit is being operated according to its design and this Permit;
 - c. Floors for any residual hazardous 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 inspect the vapor recovery systems daily to ensure that solvent vapor breakthrough has not occurred through the granular activated carbon canisters.
 5. The Permittee shall document compliance with Special Permit Condition III.C., and record and maintain the information in the facility operating record.

- J. Recordkeeping and Reporting [10 CSR 25-7.264(1), incorporating 40 CFR 264.602]
1. The Permittee shall keep a record of all incoming and outgoing shipments of hazardous and infectious 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 systems or secondary containment system to the environment, except for:
 - a. A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned up within four hours of release; and
 - b. Releases that are contained within a secondary containment system and cleaned up within 24 hours of release.
 3. Within 30 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 30-day submittal period expires;
 - c. Proximity of downgradient drinking water, surface water, and populated areas;
 - d. Description of response actions taken and/or any future planned actions; 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 CFR 264.601(a), (b), or (c) as deemed appropriate by the Department.

4. The Permittee shall submit to the Department all certifications of major repairs, which shall be consistent with the specifications found in the approved permit application to correct leaks within seven calendar days of the Subpart X Miscellaneous Treatment Unit being returned to use.
 5. The Permittee shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of the Subpart X Miscellaneous Treatment Unit.
 6. The Permittee shall keep on file at the facility the written assessment of the Subpart X Miscellaneous Treatment Unit's integrity.
 7. The Permittee shall maintain, calibrate, and operate all continuous monitoring systems used to monitor operating parameters required by Special Permit Condition III.G. and all continuous monitoring systems specified in the approved permit application for each Subpart X Miscellaneous Treatment Unit.
- K. Special Requirements for Ignitable or Reactive Wastes [10 CSR 25-7.264(1), incorporating 40 CFR 264.601 and 40 CFR 264.17]
- The Permittee shall not place ignitable or reactive waste in the treatment system or in the secondary containment system, unless the procedures specified in the approved permit application are followed.
- L. Special Requirements for Incompatible Wastes [10 CSR 25-7.264(1), incorporating 40 CFR 264.601 and 40 CFR 264.17]
1. The Permittee shall not place incompatible wastes or materials in any of the treatment units, unless such action complies with the requirements of 40 CFR 264.17(b) and 40 CFR 264.17(c).
 2. The Permittee shall not place incompatible wastes or materials in the same treatment system or secondary containment system, unless such action complies with the requirements of 40 CFR 264.17(b).
 3. The Permittee shall not place hazardous wastes or materials in a treatment system that has not been decontaminated and that previously

held an incompatible waste or material, unless such action complies with the requirements of 40 CFR 264.17(b) and 40 CFR 264.17(c).

- M. Closure [10 CSR 25.7.264(1), incorporating 40 CFR 264.601 and 40 CFR 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, and contaminated equipment and structures, and close according to the Closure Plan included in 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, in accordance with 40 CFR 270.42. The Closure Plan, closure activities, cost estimates for closure, and financial responsibility for the miscellaneous unit shall meet all requirements specified in 10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subparts G and H.

IV. Off-Property Requirements [10 CSR 25-7.270(1), incorporating 40 CFR 270.32(b)(2)]

- A. Traffic Routes

The Permittee and other hazardous waste transporters shall use the acceptable transportation routes within Pike County, in the vicinity of the permitted facility property, for the transportation of hazardous wastes to and from the facility:

1. State Route NN to West Industrial Drive; or
2. Highway 54 to State Route NN to West Industrial Drive.
3. Private roads through private property or Georgia Street through the City of Louisiana are not acceptable to use for the transportation of hazardous wastes to or from the facility.

- B. Off -Property Emergency Response [10 CSR 25-7.270(1), incorporating by reference 40 CFR 270.32(b)(2)]
1. The Permittee shall provide emergency response resources off-property only for incidents involving the transportation of hazardous wastes to or from the facility, or for incidents involving hazardous waste and/or infectious healthcare waste at the facility, at the request of any local government unit within the limits of Pike County and other nearby counties in Missouri who have responsibility along acceptable transportation routes.
 2. The emergency response resources shall include those capabilities of the facility emergency response team that are requested by the local government unit, but that are not being utilized in another incident response.
 3. The Permittee shall comply with all applicable federal, state, and local laws involving such response activity.
 4. The Permittee shall provide its emergency contact phone number(s) and comprehensive information on handling hazardous wastes and/or infectious wastes in transportation incidents to Pike County and other nearby counties in Missouri, including response organizations that have responsibility along the acceptable transportation routes, as noted in Special Permit Condition IV.A.
 5. A copy of the information provided, along with a mailing list of local government unit emergency contacts, shall be maintained and updated yearly, and shall be placed in the facility operating record.
- C. Arrangements with Local Authorities

The Permittee shall attempt to enter into an arrangement with an emergency response agency (e.g., another nearby city or county local fire department) to provide emergency services at the facility property as a back-up to the emergency services provided by the facility and the City of Louisiana Fire Department. Such an arrangement for a back-up emergency response agency shall be in effect prior to the facility conducting operations, unless the back-up emergency response agency refuses to enter into such an arrangement, in which case the Permittee shall document said refusal. In the event of a

documented refusal, the facility's operation shall not be contingent upon such an arrangement with a back-up emergency response agency being in effect.

V. Waste Minimization [10 CSR 25-7.264(1), incorporating 40 CFR 264.73(b)(9)]

Pursuant to 40 CFR 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 that 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. Air Emission Standards for Tanks and Containers [10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subparts BB, CC, and DD]

The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subparts BB, CC, and DD, for all units identified in the approved permit application.

VII. Additional Conditions [10 CSR 25-7.270(1), incorporating 40 CFR 270.32(b)(2)]

A. Plant Sampling Program

1. Monthly sampling of leaves, foliage, or bark will be conducted on plants during the growing season, in the rain garden on the west side of the facility building.
2. The samples will be analyzed for volatile organic compounds to assess potential impacts related to emissions from the permitted facility.
3. Sampling results will be placed in the facility's operating record and a copy shall be sent to the Stark Brothers Nursery when the results have been verified and quality assured.
4. A report of the results from the sampling required by Special Permit Condition VII.A.1. shall be provided to the Department and Stark Brothers Nursery within 60 calendar days after the end of the growing season.

5. The benchmark limit for corrective action for plant sampling will be set at the lowest achievable laboratory detection limit, the practical quantitation limit (PQL), for all volatiles and all semi-volatiles using EPA SW-846 Method 8260 and EPA SW-846 Method 8270 or alternate testing method(s) if approved by the Department. A background sample(s) will be collected from foliage on Stark Brothers Nursery's property before any hazardous waste treatment operations commence. A copy of the background sampling results will be provided to the Department and Stark Brothers Nursery within 15 calendar days after the laboratory test results have been verified and quality assured.
 6. If the monthly plant sampling results exceed the PQLs for the above EPA Test Methods or the concentrations established as the background level(s), whichever is higher, the Permittee shall take corrective action. Corrective action steps shall include, but not be limited to, notification within 15 calendar days after the laboratory test results are verified and quality assured, followed by an initial investigation/assessment report within 30 calendar days that identifies potential actions to address any measured levels that may not be protective of human health or the environment. This corrective action notification and report will be provided to both the Department and Stark Brothers Nursery.
- B. Daily Total Hydrocarbon (TH) and Odor Sampling
1. Daily TH monitoring will be conducted with a handheld monitor at the discharge vent of the activated carbon system during operations. The Permittee will cease air flow through the individual carbon unit and initiate change out of the carbon when the volatile organic measured level meets or exceeds 250 parts per million (ppm).
 2. The Permittee shall establish a background TH concentration from downwind of the facility building, based on the humidity and season(s) and at a time when the facility is not being operated. The facility must not have been in operation for at least 2 hours before the background measurement is taken.
 3. Daily TH monitoring will be conducted at the property line downwind from the facility building during operations. If the TH concentration downwind of the facility building at the property line exceeds one ppm

above background established in Special Permit Condition VII.B.2., the Permittee will immediately discontinue all loading, unloading, and fuel blending operations. Operations shall not resume until the source of the TH, if on the permitted property, has been controlled or removed. If the source of TH is determined to be from an off-property source, the Permittee shall notify the Department and the Stark Brothers Nursery and operations may resume. The Permittee will notify the Department and the Nursery when operations cease, resume, and describe what, if any, corrective actions were taken to address each exceedance.

4. Scentometer readings will be taken at the property line downwind from the loading dock on all loads for the first 6-months of operation and thereafter on any new source loads and on any waste loads that are anticipated by the Permittee to have elevated odors based upon Scentometer testing results performed on previous loads. All operations shall cease immediately if an observable odor with the scentometer is detected when testing in accordance with the requirements of 10 CSR 10-6.165(3). Operations shall not resume until the source of the odor resulting from the facility's operations has been controlled or removed from the permitted property. If the source of odor is determined to be from an off-property source, the Permittee shall notify the Department and the Stark Brothers Nursery and operations may resume. The Permittee shall notify the Department and the Nursery when operations cease, resume, and describe what, if any, corrective actions were taken as a result of odor detection with the Scentometer.
 5. The results of the sampling required by Special Permit Condition VII.B. shall be recorded and placed in the facility's operating record and provided to Stark Brothers Nursery daily.
 6. The results from the sampling required by Special Permit Condition VII.B. shall be provided to the Department upon request.
- C. On-going sampling, testing, and reporting requirements required by Special Condition VII. may be modified, suspended, or terminated upon agreement between the Permittee, Department, and other stakeholders. Any modification, suspension, or termination may require modification of this Permit pursuant to 10 CSR 25-7.270(1), incorporating 40 CFR 270.42.

CORRECTIVE ACTION CONDITIONS

The following Corrective Action Conditions are “contingent” in that no known SWMUs or AOCs have been identified that require investigation. Should a future release(s) occur at the facility, “active” corrective action activities may be required pursuant to the Corrective Action Conditions of this Permit. Should corrective action become necessary, the Permittee shall comply with all applicable corrective action requirements contained in 10 CSR 25-7.264(1), incorporating 40 CFR Part 264 Subparts F and G, and all provisions of this Permit, for any newly-identified SWMUs, AOCs, and releases identified pursuant to the provisions of this Permit.

I. Identification of SWMUs and AOCs

The Permittee completed a Phase I Environmental Site Assessment prior to purchasing the facility property, 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 site assessment was completed September 12, 2016, and did not identify any SWMUs or AOCs that required further investigation and/or corrective action.

II. Notification Requirements for, and Assessment of, Newly-Identified SWMUs and AOCs

- A. The Permittee shall notify the Department in writing, no later than 15 calendar days after discovery (e.g., visual observations, laboratory test results, or information not previously available) or after discovery should have been made, of any new SWMU(s) or AOC(s) identified after the issuance of this Permit.
- 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 receipt of 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 of Departmental approval of the plan; and
 4. Identification of all data to be collected 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 SWMUs/AOCs and a 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 RCRA Facility Investigation (RFI), at specific unit(s) identified in the SWMU/AOC Assessment Report.
- F. If the Department determines that additional investigations are needed, the Department may require the Permittee to prepare and submit 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 (e.g., visual observations, laboratory test results, or information not previously available) or after discovery should have been made, of any newly-identified release(s) of hazardous wastes or hazardous constituents from any previously-identified SWMU(s) or AOC(s) at the facility, including those being investigated and reported as part of the corrective action process that 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 receipt of 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 of Departmental approval of the plan; and
 4. Identification of all data to be collected 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 SWMUs or AOCs 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 for approval a work plan for such investigations in accordance with 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

- A. Should the Permittee become aware of a situation that may require any ISMs that may be necessary to protect human health or the environment, the following conditions shall apply:
1. The Permittee shall notify the Department within 24 hours after becoming aware or should have become aware of a situation that may require ISMs to protect human health or the environment. The Department may examine the facility's inspection records to determine if the Permittee should have known that 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 that 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, no later than ten 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 determined by the Department 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 approval by the Department. Proposed ISMs determined by the Department 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. If the Department determines that additional investigations are needed, the Department may require the Permittee to conduct an RFI. The Department shall notify the Permittee, in writing, of this decision. Within 60 calendar days after receipt of the Department's request to conduct an RFI, and after meeting with the Department to discuss the content of the Work Plan, the Permittee

shall prepare and submit an RFI Work Plan to the Department for review and approval.

- B. The RFI Work Plan shall be 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. In order to substantiate future corrective action decisions, the RFI Work Plan shall contain provisions that are sufficient to meet the following objectives and a proposed schedule for implementing the RFI Work Plan, which is predicated on the date of Departmental approval of 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 utilized to substantiate future corrective action decisions.
- C. The RFI Work Plan shall be appropriate for facility-specific conditions and shall be generally 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 guidance document entitled, Resource Conservation and Recovery Act Facilities Investigation Remedy Selection Track: A Toolbox for Corrective Action, May 20, 2016. At a minimum, the 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 submission of reports (including the RFI Report);
 3. The qualifications of personnel performing or directing the investigations, including contractor personnel; and

4. The overall management of the RFI activities.
- D. The RFI Work Plan shall include a Quality Assurance Project Plan (QAPP). The QAPP shall present the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to achieve the data quality goals of the RFI. It shall include, at a minimum, the RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures, and 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.
 - E. The Permittee shall prepare and maintain a Health and Safety Plan during the project that assures the RFI activities are conducted in a manner that is protective of human health and the environment.
 - F. Due to the complexity of defining the extent of contamination, the Permittee may be required to use a phased approach that requires the submittal of supplemental RFI Work Plans.
 - G. The Department shall review and approve the RFI Work Plan(s) according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the RFI Work Plan(s) according to the schedules contained in the approved plan(s).

VI. RCRA Facility Investigation (RFI) Report

- A. Should the submittal of an RFI Work Plan become necessary, the Permittee shall submit a RFI Report to the Department, according to the schedule specified in the approved RFI Work Plan described in Corrective Action Condition V. The RFI Report shall present all information obtained under the approved RFI Work Plan, along with a brief facility description and map showing the property boundary and all SWMUs and AOCs. The RFI Report shall contain adequate information to support additional corrective action decisions at the facility. Information contained in the 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.

- B. The RFI Report shall provide an interpretation of the RFI information gathered, supported with adequate documentation, to enable the Department to determine whether additional ISMs or a Corrective Measures Study (CMS) may be necessary. The 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 the interpretation of 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., identification of any potential bias in the RFI data and documentation of its precision, accuracy, representativeness, completeness, comparability, validation, etc.)
- C. The Department shall review and approve the RFI Report according to the procedures described in General Permit Condition IV. If the Department determines the objectives of the RFI have not been met, the Department may require additional investigation. Upon approval of the RFI Report, the Department shall notify the Permittee of the next step in the corrective action process, which may include submission of a CMS Work Plan or equivalent, as described in Corrective Action Condition VII.

VII. Corrective Measures Study (CMS) Work Plan

- A. If the Department determines that there has been a release of hazardous waste or hazardous constituents 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 equivalent. 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 to be evaluated by the Permittee.
- B. As part of the CMS or equivalent, the Department may require the Permittee to evaluate one or more specific remedial alternatives for removal, containment, and treatment of 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 protection of human health and the environment.

- C. Within 45 calendar days after receipt of the Department's request to conduct a CMS or equivalent, and after meeting with the Department to discuss the nature and scope of the CMS or equivalent remedy evaluation, the Permittee may be required to submit a CMS Work Plan or equivalent to the Department for review and approval. The CMS Work Plan or equivalent 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 guidance document entitled, Resource Conservation and Recovery Act Facilities Investigation Remedy Selection Track: A Toolbox for Corrective Action, May 20, 2016. At a minimum, the CMS Work Plan or equivalent shall provide the following information, as appropriate, and a proposed schedule for implementing the elements of the CMS Work Plan or equivalent:
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 that were 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, predicated on the date of Departmental approval of the CMS Work Plan or equivalent.
 7. The proposed format for ranking remedial alternatives or a combination of alternatives in support of a preferred remedial alternative or combination of alternatives.

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 equivalent according to the procedures described in General Permit Condition IV. The Permittee shall complete all activities described in the CMS Work Plan or equivalent according to the schedule contained in the approved plan.

VIII. Corrective Measures Study (CMS) Report

- A. The Permittee shall submit a CMS Report or equivalent to the Department according to the schedule specified in the approved CMS Work Plan or equivalent described in Corrective Action Condition VII. The CMS Report or equivalent shall present all information obtained under the approved CMS Work 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 Report or equivalent shall describe and discuss each remedial alternative or combination of alternatives that was evaluated, including any bench-scale or pilot tests conducted. The CMS Report or equivalent 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 Report or equivalent;

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 implementation of 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).
- C. The CMS Report or equivalent shall contain information that is 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 Report or equivalent according to the procedures described in General Permit Condition IV. Upon approval of the CMS Report or equivalent, 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 Report or equivalent, if required, as described in Corrective Action Condition VIII., the Department shall, in coordination with the Permittee, prepare a draft 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 draft Statement of Basis, a permit modification shall be initiated in accordance with 10 CSR 25-270(1), incorporating 40 CFR 270.41 or 270.42(c), as applicable, to facilitate public review and comment on

the Statement of Basis and proposed final remedy, approval of a final remedy by the Department, and implementation of the approved final remedy by the Permittee. When, and if, required, the Permittee shall provide assurances of financial responsibility for the approved corrective action final remedy pursuant to 10 CSR 25-264(1), incorporating 40 CFR 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. Planned and Contingent Activities

- A. There are currently no planned corrective action activities specified in this Permit.
- 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 3.

XI. 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 the applicable 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; 10 CSR 25-8; 10 CSR 25-7.264(1), incorporating 40 CFR 264.101 and 40 CFR Part 264 Subpart H; and 10 CSR 25-7.270(1), incorporating 40 CFR 270.30, 40 CFR 270.40, 40 CFR 270.42, and 40 CFR 270.51.

I. Cost Estimates

A. Closure, Post-Closure and/or Corrective Action Cost Estimates

Within 60 calendar days of the effective date of this Permit, the Permittee shall submit an updated closure cost estimate as specified in Schedule of Compliance item I.E. If, in the future, the Permittee submits a notice of intent to close the facility and/or if a Corrective Measures Study (CMS) or equivalent becomes necessary as part of the corrective action activities required by this Permit, within 60 calendar days of notification of closure or approval of a final remedy pursuant to Corrective Action Condition IX., the Permittee shall submit an updated, detailed written cost estimate, in current dollars, of the cost of hiring a third party to perform the closure, post-closure care, and/or corrective action activities required by this Permit.

1. All closure, post-closure care, and/or corrective action cost estimates shall account for the total cost of all work activities that are expected to continue until such time as final clean-up objectives are met and confirmed, including any necessary long-term costs, such as operation, maintenance, and monitoring costs.
2. A third party is a party who:
 - a. Is neither a parent nor a subsidiary of the Permittee and
 - b. Does not share a common parent or subsidiary with the Permittee.
3. 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.

4. Discounting is not allowed for closure or post-closure 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 period the full amount of financial assurance will be available based on the future value of money.
5. The Permittee shall submit each closure, post-closure, and/or 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 submission of a revised cost estimate for further evaluation and final written response.

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

B. Revision of Closure, Post-Closure, and/or Corrective Action Cost Estimates

1. Annual Adjustment for Inflation

The Permittee shall annually adjust the closure, post-closure, and corrective action cost estimate, 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 CFR 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 establishment of the financial assurance instrument used to comply with this section.

2. Additional Closure, Post-Closure and/or Corrective Action Activities

The Permittee shall adjust the closure, post-closure, and/or corrective action cost estimate if:

- a. The Permittee or the Department determines that any additional closure, post-closure, and/or corrective action activities are required; or
- b. Any other conditions increase or decrease the estimated cost of the closure, post-closure, and/or corrective action activities to be performed under this Permit.

If the Department determines that a new cost estimate is required, the Department shall notify the Permittee in writing of this requirement.

3. The Permittee shall submit each revised closure, post-closure, and/or corrective action cost estimate to the Department for review and evaluation. If the new cost estimate requires further revision, the Department shall notify the Permittee in writing of the estimate's deficiencies and specify a due date for submission of a new revised cost estimate.

II. Financial Assurance

In order to provide for the full and final completion of the closure, post-closure, and/or 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, and/or corrective action cost estimate that received a final written response from the Department. The Permittee may use one or more of the financial assurance forms generally described in Financial Assurance Condition II.J. All financial assurance instruments provided pursuant to this Permit shall be satisfactory in form and substance as determined by the Department. The Department reserves the right to limit the choices of the Permittee to one or more of the instruments described in Financial Assurance Condition II.J., on a case-by-case basis, in order to ensure the full and final completion of the closure, post-closure, and/or corrective action activities required by this Permit.

A. Timeframes for Financial Assurance Instruments

1. Within 30 calendar days after receipt of the Department's final written response to the Permittee's cost estimates pursuant to this Permit, the Permittee shall submit draft financial assurance instruments and related documents to the Department for review and evaluation.

2. Within 30 calendar days after receiving the Department’s final written response regarding the draft financial assurance instrument(s), the Permittee shall ensure that the issuing institution submits all original executed and/or otherwise finalized instruments or other documents to the Department 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.

B. Certified Mail

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

C. Multiple Instruments

The Permittee may combine more than one mechanism to demonstrate financial assurance for the closure, post-closure, and/or corrective action activities required by this Permit. However, mechanisms guaranteeing performance, rather than payment, may not be combined with other instruments.

D. Inadequate Financial Assurance Instrument

1. If at any time the Department determines that a financial assurance instrument 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, and/or corrective action activities required by this Permit or for any other reason.
 - a. Within 30 calendar days of receipt of such notice, the Permittee shall submit draft revised financial assurance instruments and related documents to the Department for review and evaluation. The draft revised financial assurance instruments and related documents shall address the inadequacies outlined in the Department’s notice.

- b. Within 30 calendar days after receiving the Department’s final written response regarding the draft revised financial assurance instrument(s), the Permittee shall ensure that the issuing institution submits all original executed and/or otherwise finalized instruments or other documents to the Department 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.
 2. If at any time the Permittee determines that any financial assurance instrument provided pursuant to this Permit is inadequate or no longer satisfies the requirements described or incorporated by reference herein, the Permittee shall notify the Department in writing within ten calendar days of this determination. This applies whether due to an adjustment in the estimated cost of the closure, post-closure, and/or corrective action activities required by this Permit or for any other reason. The Permittee shall follow the procedures in Financial Assurance Condition II.D.1.a. to replace the financial assurance instrument.

E. Obligation to Complete Closure, Post-Closure and/or Corrective Action Activities

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

F. Automatic Renewal

All financial assurance instruments shall automatically renew at the time of their expiration unless the financial assurance provider notifies both the Permittee and the Department by certified mail of a decision to cancel, terminate, or not renew a financial assurance instrument. The Permittee and the 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 of receipt of the notice by certified mail by both the Permittee and the Department.

1. Within 90 calendar days following receipt of such notice by both the Permittee and the Department, the Permittee shall provide alternate financial assurance and obtain a written final 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 expiration of the instrument. The notification to the financial assurance provider shall instruct the financial assurance provider to immediately deposit the funds obligated under the financial assurance into the standby trust fund or a newly created trust fund acceptable to the Department.

G. Modification of Amount and/or Form of Financial Assurance

1. Reduction of Amount of Financial Assurance

If the Permittee believes that the estimated cost to complete the closure, post-closure, and/or 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. The amount of the financial assurance proposed shall be at least equal to the estimated cost of the remaining closure, post-closure, and/or corrective action activities required by this Permit. The written proposal shall specify, at a minimum, the cost of the remaining closure, post-closure, and/or corrective action activities to be performed and the basis upon which such cost was calculated (e.g., years remaining until established clean-up standards are expected to be met). In seeking approval of a revised financial assurance amount, the Permittee shall follow the procedures described in Financial Assurance Condition II.G.2.b.

The Department shall notify the Permittee in writing regarding its evaluation of the revised financial assurance amount. The Permittee may reduce the amount of the financial assurance 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, other than a reduction in amount, is authorized, except as provided in Financial Assurance Condition II.G.2.

2. 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 to change the form of financial assurance. The submission of such a proposal shall be as provided in Financial Assurance Condition II.G.2.b. The acceptance of a proposal submitted under Financial Assurance Condition II.G. shall be made at the Department's sole discretion.
- b. A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum:
 - (1) The cost of the remaining closure, post-closure, and/or corrective action activities to be performed;
 - (2) The basis upon which such cost was calculated; and
 - (3) 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. The Department shall notify the Permittee, in writing, of its decision regarding the revised or alternative form of financial assurance submitted pursuant to this paragraph.

- c. Within 30 calendar days of receiving a final written response regarding the proposed revised or alternative financial assurance, the Permittee shall ensure that the issuing institution submits all original executed and/or otherwise finalized

instruments or other documents to the Department 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.

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

H. Performance Failure

1. In the event that the Department determines the Permittee:
 - a. Has ceased implementation of any of the closure, post-closure, and/or corrective action activities required by this Permit; or
 - b. Is significantly or repeatedly deficient or late in its performance of the closure, post-closure, and/or corrective action activities required by this Permit; or
 - c. Is implementing the closure, post-closure and/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 a written notice (“Performance Failure Notice”) of the Permittee’s failure to perform to both the Permittee and the financial assurance provider. The notice shall specify the grounds upon which the notice was issued and shall provide the Permittee a period of ten calendar days to remedy the circumstances.

2. If the Permittee fails to remedy the Performance Failure to the Department’s satisfaction before the expiration of the ten calendar-day notice period specified in Financial Assurance Conditions II.H.1., 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 into the standby trust fund, or a newly created trust fund acceptable to the Department, the remaining funds obligated under the financial assurance instrument; or
 - b. Arrange for performance of the closure, post-closure, and/or corrective action activities required by this Permit.
3. The Department shall give the Permittee written notice if:
 - a. The Department determines that any of the circumstances described in Financial Assurance Conditions II.H.1.a., b., or c. have occurred; and
 - b. The Department is nevertheless unable, after reasonable efforts, to secure the payment of funds or performance of the closure, post-closure, and/or corrective action activities required by this Permit from the financial assurance provider.
4. Within ten calendar days of receiving such written notice, the Permittee shall provide cash to fund the standby trust fund, or a newly-created trust fund acceptable to the Department. The funds shall at least equal the cost of the remaining closure, post-closure, and/or corrective action activities required by this Permit. The deposit shall be made in immediately available funds and without setoff, counterclaim, or condition of any kind.

I. Release of Financial Assurance

The Permittee may submit a written request to the Department to release the Permittee from the requirement to maintain financial assurance after the Department and the Permittee have mutually agreed that all closure, post-closure, and/or corrective action activities required by this Permit are complete. The Department shall notify both the Permittee and the provider(s) of the financial assurance if and when the Permittee is released from all financial assurance obligations under this Permit. The Permittee shall not release, cancel, or terminate any financial assurance provided pursuant to this Permit, except as provided in this paragraph or Financial Assurance Condition II.G.2.

J. Financial Assurance Instruments

The wording of the financial assurance documents shall meet the requirements of 10 CSR 25-7.264(1), incorporating 40 CFR 264.143 and 40 CFR 264.151, except that deviation in wording of a financial assurance instrument 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

The trust fund shall be:

- a. Established for the benefit of the Department;
- b. 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; and
- c. Acceptable in all respects to the Department.

The trust agreement shall provide that the trustee shall make payments from the fund as the Department shall direct in writing:

- d. To reimburse the Permittee for expenditures made by the Permittee for closure, post-closure, and/or corrective action activities performed according to this Permit; or
- e. To pay any other person whom the Department determines has performed or will perform the closure, post-closure, and/or corrective action activities required by this Permit.

The trust agreement shall further state that the trustee shall not refund to the grantor any amounts from the fund until the Department has advised the trustee, in writing, that the closure, post-closure, and/or corrective action activities performed according to this Permit have been completed to the satisfaction of the Department.

2. Surety Bond

A surety bond shall unconditionally guarantee either:

- a. Payment at the direction of the Department into a standby trust fund that meets the requirements of the trust fund in Financial Assurance Condition II.J.1.; or
- b. Performance of the closure, post-closure, and/or 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.

If the Permittee seeks 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.J.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.H.

3. Irrevocable Letter of Credit

An irrevocable letter of credit shall be payable at the direction of the Department into a standby trust fund that meets the requirements of Financial Assurance Condition II.J.1. The letter of credit shall be issued by a financial institution:

- a. That has the authority to issue letters of credit; and
- b. Whose letter-of-credit operations are regulated and examined by a federal or state agency.

If the Permittee seeks 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.J.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.H.

4. Policy of Insurance

A policy of insurance shall:

- a. Provide the Department with rights as a beneficiary which are acceptable to the Department; and
- b. Be issued by an insurance carrier that:
 - (1) Has the authority to issue insurance policies in Missouri; and
 - (2) Whose insurance operations are regulated and examined by a federal or state agency.
- c. The insurance policy shall be issued for a face amount at least equal to the current closure, post-closure, and/or corrective action cost estimate for which the facility has received a written final review response from the Department, except that the face amount may exclude costs that are covered by another financial assurance instrument, as permitted in Financial Assurance Condition II.C.
- d. The insurance policy shall state that the insurer shall make payments up to an amount equal to the face amount of the policy, as directed by the Department in writing:
 - (1) To reimburse the Permittee for expenditures made by the Permittee for closure, post-closure, and/or corrective action activities performed according to this Permit; or
 - (2) To pay any other person whom the Department determines has performed or will perform the closure, post-closure, and/or corrective action activities required by this Permit.

- e. 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.H.

FACILITY SUBMISSION SUMMARY

**Table 2 - 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.
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.B.
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.C.
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.D.
Updated closure plan and closure cost estimate.	Within 60 calendar days after effective date of this Permit.	Schedule of Compliance Item I.E.
Updated draft financial assurance instrument.	Within 60 calendar days after the Department’s final written response on the updated closure cost estimate.	Schedule of Compliance Item II.
Execute/finalize updated financial assurance instrument reflecting the updated cost estimate.	Within 30 calendar days after receiving the Department’s final written response regarding the draft financial assurance instrument.	Schedule of Compliance Item III.
Submit all original executed/finalized financial assurance instruments and related documents.	Within 30 calendar days after receiving the Department’s final written response regarding the draft financial assurance instrument.	Schedule of Compliance Item IV.

Submittal Requirements	Due Date*	Permit Condition
Quarterly Reports with information required by 10 CSR 25-5.262(2)(D) and 10 CSR 25-7.264(2)(E).	Within 45 calendar days after end of each quarter.	Standard Permit Condition I.
Biennial Report with information required by 40 CFR 264.75.	March 1 of each even numbered calendar year.	General Permit Condition I.
Permit Renewal Application.	At least 18 months prior to expiration date of this Permit.	Standard Permit Condition II.
Analytical results from the plant sampling program shall be provided to the Department and Stark Brothers Nursery.	Within 60 calendar days after the end of the growing season.	Special Permit Condition VII.A.4.
A copy of the background sampling results will be provided to the Department and Stark Brothers Nursery	Within 15 calendar days after the laboratory test results have been verified and quality assured.	Special Permit Condition VII.A.5.
If results exceed PQLs a corrective action report will be provided to both the Department and Stark Brothers Nursery.	Report within 30 calendar days after the laboratory test results have been verified and quality assured.	Special Permit Condition VII.A.6.
The results of the sampling required by Special Permit Condition VII.B. shall be recorded and placed in the facility's operating record and provided to Stark Brothers Nursery.	Daily.	Special Permit Condition VII.B.5
The results from the sampling required by Special Permit Condition VII.B. shall be provided to the Department.	Upon request.	Special Permit Condition VII.B.6

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

**Table 3 - 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 ten calendar days after determination.	IV.A.3.
RCRA Facility Investigation (RFI) Work Plan.	Within 60 calendar days of notice by the Department that a Work Plan is required.	V.A.
RCRA Facility Investigation (RFI) Report.	According to the schedule in the approved RFI Work Plan.	VI.A.

Contingent Submittal Requirements	Due Date	Corrective Action Condition
Corrective Measures Study (CMS) Work Plan or equivalent	Within 45 calendar days of notice by the Department that a Work Plan or equivalent is required.	VII.C.
Corrective Measures Study (CMS) Report or equivalent.	According to the schedule in the approved CMS Work Plan or equivalent.	VIII.A.

FIGURES

Figure 1 – Facility Location

**Figure not available due to size.
Please see hard copy or separate electronic file online at
dnr.mo.gov/env/hwp/permits/mor000556985/20170926-figure1.pdf**

Trioxo, Incorporated
Missouri Hazardous Waste Management Facility Permit – Part I
MOR000556985
Page 71

Figure 2 – Facility Property Boundaries

Figure not available due to size.
Please see hard copy or separate electronic file online at
dnr.mo.gov/env/hwp/permits/mor000556985/20170926-figure2.pdf

Figure 3 – Floor Plan of the Facility

Figure not available due to size.
Please see hard copy or separate electronic file online at
dnr.mo.gov/env/hwp/permits/mor000556985/20161201-figure3.pdf