Permittee: Midwest Environmental Services, Inc. dba Klor Kleen

U.S. EPA ID: OHD 980 821 862

Facility Name: Klor Kleen

Mailing Address: P.O. Box 14029

City: Cincinnati State: OH Zip: 45250

Facility Street Address: 3118 Spring Grove Ave

City: Cincinnati State: OH Zip: 45225

Operator Name: Midwest Environmental Services, Inc. dba Klor Kleen

Mailing Address: P.O. 218

City: Brownstown State: IN Zip: 47220

Owner Name: Midwest Environmental Services, Inc.

Mailing Address: P.O. Box 218

City: Brownstown State: IN Zip: 45225

Authorized Activities

In reference to the application of Klor Kleen for an Ohio Hazardous Waste Facility Installation and Operation Renewal Permit under Ohio Revised Code (ORC) Chapter 3734 and the record in this matter, you are authorized to conduct at the above-named facility the following hazardous waste management activities:

- Storage of Hazardous Waste in Containers
- Corrective Action

Permit Approval

Entered into the Journal of the Director on: May 19, 2017

Craig W. Butler, Director
Ohio Environmental Protection Agency

This permit approval is based upon the record in this matter which is maintained at the offices of the Ohio Environmental Protection Agency. The Director has considered the application, accompanying information, inspection reports of the facility, a report regarding the facility's compliance or noncompliance with the terms and conditions of its permit and rules adopted by the Director under this chapter, and such other information as is relevant to the operation of the facility. The Director has determined that the facility under the existing permit has a history of compliance with ORC Chapter 3734, rules adopted under it, the existing permit, or orders entered to enforce such requirements that demonstrate sufficient reliability, expertise, and competency to operate the facility henceforth under this chapter, rules adopted under it, and the renewal permit.
A. GENERAL PERMIT CONDITIONS

A.1 Effect of Permit
ORC Sections 3734.02 (E) and (F) and 3734.05
OAC Rule 3745-50-58(G)

(a) The Permittee is authorized to store hazardous waste in containers in accordance with the terms and conditions of this Ohio hazardous waste permit (hereinafter “permit”), ORC Chapter 3734, all applicable Ohio hazardous waste rules, all applicable regulations promulgated under the Resource Conservation and Recovery Act (RCRA), as amended, and the permit application. The permit application, as submitted to Ohio EPA on October 16, 2015 and last updated on May 27, 2016, is hereby incorporated into this permit. In the instance of inconsistent language or discrepancies between the above, the language of the more stringent provision shall govern.

(b) Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly authorized or specifically exempted by law. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights. Compliance with the terms and conditions of this permit does not obviate Permittee’s obligation to comply with other applicable provisions of law governing protection of public health or the environment including but not limited to the Community Right-to-Know law under ORC Chapter 3750.

A.2 Permit Actions
OAC Rule 3745-50-58(F)

This permit may be modified or revoked as specified by Ohio law. The filing of a request by the Permittee for a permit modification, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay any permit term or condition.

A.3 Permit Effective/Expiration Date
OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director’s Journal. The permit expiration date is ten (10) years after the effective date.

A.4 Severability

The provisions of this permit are severable, and 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.
A.5 **Duty to Comply**  
OAC Rule 3745-50-58(A)

The Permittee must comply with all applicable provisions of ORC Chapter 3734, all applicable Ohio hazardous waste rules, and all terms and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by the laws of the State of Ohio. Any permit noncompliance, other than noncompliance authorized by the laws of the State of Ohio, constitutes a violation of ORC Chapter 3734 and is grounds for enforcement action, revocation, modification, denial of a permit renewal application or other appropriate action.

A.6 **Duty to Reapply and Permit Expiration**  
OAC Rules 3745-50-40(D), 3745-50-58(B), 3745-50-56 and ORC Section 3734.05(H)

(a) If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a completed permit application for a hazardous waste facility installation and operation permit renewal and any necessary accompanying general plans, detailed plans, specifications, and such information as the Director may require, to the Director no later than one hundred eighty (180) days prior to the expiration date of this permit, unless a later submittal date has been authorized by the Director upon a showing of good cause.

(b) The Permittee may continue to operate in accordance with the terms and conditions of the expired permit until a renewal permit is issued or denied if:

(i) The Permittee has submitted a timely and complete permit application for a renewal permit under OAC Rule 3745-50-40; and

(ii) Through no fault of the Permittee, a new permit has not been issued pursuant to OAC Rule 3745-50-40 on or before the expiration date of this permit.

(c) The Corrective Action obligations contained in this permit will continue regardless of whether the facility continues to operate or ceases operation and closes. The Permittee is obligated to complete facility-wide Corrective Action under the conditions of this permit regardless of the operational status of the facility. The Permittee must submit an application for permit renewal at least one hundred eighty (180) days before the expiration date of this permit pursuant to OAC Rule 3745-50-40(D) unless: a) the permit has been modified to terminate the Corrective Action schedule of compliance and the Permittee has been released from the requirements for financial assurance for Corrective Action; or b) a later submittal date has been authorized by the Director.
A.7  Need to Halt or Reduce Activity Not a Defense  
OAC Rule 3745-50-58(C)  

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

A.8  Duty to Mitigate  
OAC Rule 3745-50-58(D)  

The Permittee must take all reasonable steps to minimize releases to the environment and must carry out such measures as are reasonable to prevent significant adverse impact on human health or the environment resulting from noncompliance with this permit.

A.9  Proper Operation and Maintenance  
OAC Rule 3745-50-58(E)  

The Permittee must at all times properly operate and maintain the facility (and related appurtenances) to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective management practices, adequate funding, adequate operator staffing and training, and where appropriate, adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the terms and conditions of this permit.

A.10  Duty to Provide Information  
OAC Rule 3745-50-58(H)  

The Permittee must furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying or revoking, or to determine compliance with, this permit. The Permittee must also furnish to the Director, upon request, copies of records required to be kept by this permit.

A.11  Inspection and Entry  
OAC Rules 3745-50-58(I), 3745-49-03 and 3745-50-30, and ORC Section 3734.07  

(a) The Permittee must allow the Director, or an authorized representative, upon stating the purpose and necessity of the inspection and upon proper identification, to:  

(i) Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the terms and conditions of this permit;
(ii) Have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

(iii) Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the terms and conditions of this permit; and

(iv) Sample, document, or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 3734 and the rules adopted thereunder, any substances or parameter at any location.

(b) Any record, report or other information obtained under the hazardous waste rules or Chapter 3734 of the Revised Code shall not be available to the public upon the Permittee’s timely submittal of a trade secret claim and satisfactory showing to Ohio EPA that all or part of the information would divulge methods or processes entitled to protection as trade secrets pursuant to Ohio Trade Secret Law and OAC Rules 3745-49-03 and 3745-50-30.

A.12 Monitoring and Records
OAC Rule 3745-50-58(I)

(a) Any sample and measurement taken for the purpose of monitoring must be representative of the monitored activity. Further, a sample must be a representative sample, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from the appendix of OAC Rule 3745-51-20, Representative Sampling Methods, or an equivalent method approved by Ohio EPA. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition (November 1986), as amended by Updates I (dated July 1992), II (dated September 1994), IIA (dated August 1993), IIB (dated January 1995), III (dated December 1996) and IIIA (dated April 1998), and additional supplements or editions thereof; Standard Methods for the Examination of Water and Wastewater: Twentieth Edition, 1999; or an equivalent method as specified in the approved waste analysis plan, or as this term is defined and used in the Ohio hazardous waste rules.

(b) Records of monitoring information must specify the:

(i) Date(s), exact place(s), and time(s) of sampling or measurements;

(ii) Individual(s) who performed the sampling or measurements;

(iii) Date(s) analyses were performed;

(iv) Individual(s) who performed the analyses;
(v) Analytical technique(s) or method(s) used; and

(vi) Results of such analyses.

A.13 Signatory Requirement and Certification of Records
OAC Rules 3745-50-58(K) and 3745-50-42

All applications, reports or information must be properly signed and certified in accordance with OAC Rule 3745-50-58(K).

A.14 Retention of Records and Information Repository
OAC Rules 3745-50-40(G), 3745-50-58(J), 3745-50-58(M), and 3745-50-58(N)

(a) The Permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by OAC Rule 3745-54-73(B)(9), and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application.

(b) The record retention period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding the facility.

(c) The Permittee must maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the permit application and any amendments, supplements or modifications of such application. The Permittee must retain a complete copy of the current application for the effective life of the permit as indicated in Permit Condition A.3.

(d) The Permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(e) The Director may require the Permittee to establish and maintain an information repository at any time, based on the factors set forth in OAC Rule 3745-50-39(C)(2). The information repository will be governed by the provisions in OAC Rules 3745-50-39(C)(3) through (C)(6).

(f) Corrective Action records must be maintained at least three (3) years after all Corrective Action activities have been completed.
A.15 Planned Changes
OAC Rules 3745-50-51 and 3745-50-58(L)(1)

The Permittee must give notice to the Director as soon as possible of any planned physical alterations or additions to the facility. All such changes must be made in accordance with OAC Rule 3745-50-51.

A.16 Waste Shipments
OAC Rules 3745-52-12 and 3745-53-11, ORC Section 3734.15(C)

The Permittee must only use properly registered transporters of hazardous waste to remove hazardous waste from the facility, in accordance with all applicable laws and rules.

A.17 Anticipated Noncompliance
OAC Rule 3745-50-58(L)(2)

The Permittee must give advance notice to the Director of any planned changes in the permitted facility or operations which may result in noncompliance with the terms and conditions of this permit. Such notification does not waive the Permittee's duty to comply with this permit pursuant to Permit Condition A.5.

A.18 Transfer of Permits
OAC Rules 3745-50-52, 3745-50-58(L)(3) and 3745-54-12

(a) The permit may be transferred to a new owner or operator only if such transfer is conducted in accordance with ORC Chapter 3734 and the rules adopted thereunder. This permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified under OAC Rule 3745-50-51. Before transferring ownership or operation of the facility, the Permittee must notify the new owner or operator in writing of the requirements of ORC Chapter 3734 and the rules adopted thereunder (including all applicable Corrective Action requirements).

(b) The Permittee's failure to notify the new owner or operator of the requirements of the applicable Ohio law or hazardous waste rules does not relieve the new owner or operator of its obligation to comply with all applicable requirements.

A.19 Compliance Reports
OAC Rules 3745-50-58(L)(5) and 3745-50-50

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule (developed in accordance with OAC Rule 3745-50-50) of this permit must be submitted to the Director no later than fourteen (14) days
following each scheduled date.

A.20  **Immediate Reporting of Noncompliance**  
OAC Rule 3745-50-58(L)(6)

(a) The Permittee must report orally to Ohio EPA’s Division of Environmental Response and Investigation & Enforcement within twenty-four (24) hours from the time the Permittee becomes aware of any noncompliance with this permit, ORC Chapter 3734 or the rules adopted thereunder, which may endanger human health or the environment, including:

   (i) Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies; and

   (ii) Any information of a release or discharge of hazardous waste or a fire or explosion from the hazardous waste facility, which could threaten the environment or human health outside the facility.

(b) The report must consist of the following information (if such information is available at the time of the oral report):

   (i) Name, address, and telephone number of the owner or operator;

   (ii) Name, address, and telephone number of the facility;

   (iii) Date, time, and type of incident;

   (iv) Name and quantity of material(s) involved;

   (v) The extent of injuries, if any;

   (vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

   (vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A.21  **Follow-Up Written Report of Noncompliance**  
OAC Rule 3745-50-58(L)(6)(c)

(a) A written report must also be provided to Ohio EPA’s Division of Environmental Response and Revitalization, Southwest District Office, within five (5) days of the time the Permittee becomes aware of the circumstances reported in Permit Condition A.20.
(b) The written report must address the items in Permit Condition A.20 and must contain a description of such noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to minimize the impact on human health and the environment and to reduce, eliminate, and prevent recurrence of the noncompliance.

(c) The Permittee need not comply with the five (5) day written report requirement if the Director, upon good cause shown by the Permittee, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

A.22 Other Noncompliance  
OAC Rules 3745-50-58(L)(10) and 3745-50-58(L)(4)

The Permittee must report to the Director all other instances of noncompliance not provided for in Permit Conditions A.19 and A.20. These reports must be submitted within thirty (30) days of the time at which the Permittee is aware of such noncompliance. Such reports must contain all information set forth within Permit Condition A.20.

A.23 Reserved

A.24 Other Information  
OAC Rule 3745-50-58(L)(11)

If at any time the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information to the Director, the Permittee must promptly submit such facts, information or corrected information to the Director.

A.25 Confidential Information  
OAC Rules 3745-49-03 and 3745-50-30

In accordance with ORC Chapter 3734 and the rules adopted thereunder, the Permittee may request confidentiality for any information required to be submitted by the terms and conditions of this permit, or any information obtained by the Director, or an authorized representative, pursuant to the authority provided under Permit Condition A.11.

A.26 Ohio Annual Permit, Disposal, and Treatment Fees  
OAC Rules 3745-50-33 through 3745-50-36

The annual permit fee, calculated pursuant to OAC Rule 3745-50-36 and payable to the Treasurer of the State, must be submitted to the Director on or before the anniversary of the date of issuance during the term of the permit. For the purpose of the payment of the Ohio Annual Permit
Fee, the date of issuance is the date the permit was entered into the Journal of the Director of Ohio EPA.

A.27 Compliance Schedule - Documents
OAC Rules 3745-50-50 and 3745-50-51

(a) Unless specified otherwise, the Permittee must submit the documents listed below to:

Ohio EPA, Director
c/o DERR, Hazardous Waste Permitting Section
P.O. Box 1049
Columbus, Ohio 43216-1049

Ohio EPA, DERR
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

(b) The Permittee must submit to the Ohio EPA within sixty (60) days after permit journalization, in accordance with Ohio’s hazardous waste rules, the following information to be incorporated in the permit application:

(i) **Updated Closure/Post-Closure Cost Estimate**
OAC Rules 3745-55-42 and 3745-55-44

Section I of the permit application containing the financial assurance mechanism for closure must be updated to include a copy of the current closure/post-closure cost estimate as set forth in OAC Rules 3745-55-42 and 3745-55-44. Since the Permittee has been adjusting the closure cost estimate for inflation in accordance with OAC Rule 3745-55-42(B) for the duration of the previous 10-year period, the Permittee must provide a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with OAC Rule 3745-55-42(A).

(ii) **Updated Financial Assurance Mechanism for Closure**
OAC Rules 3745-55-43

Section I of the permit application containing the financial assurance mechanism for closure must be updated to include a copy of the current financial assurance mechanism, as set forth in OAC Rules 3745-55-43, and as specified by the wording requirements of OAC Rule 3745-55-51. The value of the financial assurance mechanism must reflect at least the current amount of the closure/post-closure cost estimate.
During the life of the permit the Permittee may change the financial assurance mechanism as stated in OAC Rules 3745-55-43. The Permittee must submit the financial assurance mechanism documentation to the Director of Ohio EPA in accordance with the parameters set forth in OAC Rules 3745-55-43.

(iii) Updated Liability Requirements
OAC Rule 3745-55-47

Section I of the permit application containing the mechanism used to demonstrate third party liability coverage must be updated to include a copy of the current liability mechanism as set forth in OAC Rule 3745-55-47 and as specified by the wording requirements of OAC Rule 3745-55-51.

During the life of the permit the Permittee may change the mechanism used to demonstrate liability coverage as stated in OAC Rule 3745-55-47. The Permittee must submit the liability mechanism documentation to the Director of Ohio EPA in accordance with the parameters set forth in OAC Rule 3745-55-47.

This information must be submitted in accordance with OAC Rule 3745-50-51.

A.28 Information to be Maintained at the Facility
OAC Rule 3745-54-74

(a) Unless otherwise specified by the hazardous waste rules, the Permittee must maintain at the facility, until closure is completed and certified by a qualified professional engineer, pursuant to OAC Rule 3745-55-15, and until the Director releases the Permittee from financial assurance requirements pursuant to OAC Rule 3745-55-43, the following documents (including amendments, revisions and modifications):

(i) Waste analysis plan, developed and maintained in accordance with OAC Rule 3745-54-13 and the terms and conditions of this permit;

(ii) Contingency plan, developed and maintained in accordance with OAC Rule 3745-54-53 and the terms and conditions of this permit;

(iii) Closure plan, developed and maintained in accordance with OAC Rule 3745-55-12 and the terms and conditions of this permit;

(iv) Cost estimate for facility closure, developed and maintained in accordance with OAC Rule 3745-55-42 and the terms and conditions of this permit;

(v) Personnel training plan and the training records, developed and maintained in accordance with OAC Rule 3745-54-16 and the terms and conditions of this permit;
(vi) Operating record, required by OAC Rule 3745-54-73 and the terms and conditions of this permit; and

(vii) Inspection schedules, developed in accordance with OAC Rules 3745-54-15, 3745-55-74 and 3745-55-95 and the terms and conditions of this permit.

(viii) Post-closure plan, as required by OAC Rule 3745-55-18(A) and the terms and conditions of this permit.

(ix) Annually-adjusted cost estimate for facility closure, as required by OAC Rules 3745-55-42 and 3745-55-44 and the terms and conditions of this permit.

(x) All other documents required by Module A, Permit Condition A.12.

(b) The Permittee must maintain copies of all inspection logs at the facility for a period not less than three (3) years from the date of inspection.

A.29 Waste Minimization Report
OAC Rules 3745-54-73 and 3745-54-75

(a) The Permittee must submit a Waste Minimization Report describing the waste minimization program required by OAC Rules 3745-54-75(H), (I), and (J); 3745-54-73(B)(9); and 3745-52-20(A) at least once every five (5) years. The provisions of OAC Rules 3745-54-75(H), (I) and (J) must be satisfied biennially. The provisions of OAC Rule 3745-54-73(B)(9) must be satisfied no less often than annually.

(b) The Permittee must submit the Waste Minimization Report to Ohio EPA’s Office of Compliance Assistance and Pollution Prevention within one hundred eighty (180) days of the effective date of this permit, and must submit updates to this report once every five (5) years thereafter.
B. GENERAL FACILITY CONDITIONS

B.1 Design and Operation of Facility
OAC Rule 3745-54-31

(a) The Permittee must design, construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, ground water or surface waters which could threaten human health or the environment.

(b) The Permittee must not accept more than 5220 tons in any one calendar year from off-site sources during the life of the permit, until such time as this permit condition is modified or renewed. This is a facility wide limitation and includes all units.

B.2 Required Notices
OAC Rule 3745-54-12

(a) Hazardous Waste from Off-Site Sources

When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), the Permittee must inform the generator in writing that the Permittee has the appropriate permits, and will accept the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record.

(b) Hazardous Wastes from Foreign Sources

The Permittee must notify the U.S. EPA regional administrator in writing at least four (4) weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source, as required by OAC Rule 3745-54-12(A). Notice of subsequent shipments of the same waste from the same foreign source is not required.

B.3 General Waste Analysis Plan
OAC Rule 3745-54-13

(a) Before the Permittee treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under OAC Rule 3745-55-13(D), the Permittee must obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of OAC Chapters 3745-54 to 3745-57, 3745-205, and 3745-270.
(b) The Permittee must follow the procedures described in the waste analysis plan found in Section C of the permit application and the terms and conditions of this permit.

B.4 Security
OAC Rule 3745-54-14

The Permittee must comply with the security provisions of OAC Rules 3745-54-14(B)(2), and (C) and Section F of the permit application.

B.5 General Inspection Requirements
OAC Rules 3745-54-15 and 3745-54-73

The Permittee must inspect the facility in accordance with OAC Rule 3745-54-15 and the inspection schedule set forth in Section F of the permit application. The Permittee must remedy any deterioration or malfunction discovered by an inspection, as required by OAC Rule 3745-54-15(C). Records of inspection must be kept for a minimum of three (3) years from the date of inspection. These records must be a part of the facility’s operating record as required by OAC Rule 3745-54-73.

B.6 Personnel Training
OAC Rule 3745-54-16

The Permittee must conduct personnel training, as required by OAC Rule 3745-54-16. This training program must contain at least the elements set forth in Section H of the permit application. The Permittee must maintain training documents and records as required by OAC Rule 3745-54-16(D) and (E).

B.7 General Requirements for Ignitable, Reactive, or Incompatible Wastes
OAC Rule 3745-54-17

The Permittee must comply with the requirements of OAC Rule 3745-54-17 and must follow the procedures for handling incompatible wastes set forth in Section D of the permit application.

B.8 Reserved

B.9 Required Equipment
OAC Rule 3745-54-32

At a minimum, the Permittee must maintain at the facility all the equipment required by OAC Rule 3745-54-32 and the equipment set forth in the contingency plan contained in Section G of the permit application.
B.10 Testing and Maintenance of Equipment
OAC Rule 3745-54-33

The Permittee must inspect, test and maintain the equipment required by Permit Condition B.9 as necessary to assure its proper operation in time of emergency, as specified in OAC Rule 3745-54-33, Section G of the permit application and the terms and conditions of this permit.

B.11 Access to Communications or Alarm System
OAC Rule 3745-54-34

The Permittee must maintain access to the communications and alarm systems, as required by OAC Rule 3745-54-34, Section F of the permit application and the terms and conditions of this permit.

B.12 Required Aisle Space
OAC Rule 3745-54-35

At a minimum, the Permittee must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, as required by OAC Rule 3745-54-35.

B.13 Arrangements with Local Authorities
OAC Rule 3745-54-37

(a) The Permittee must comply with the requirements of OAC Rule 3745-54-37(A) by making a diligent effort to:

(i) Make arrangements and familiarize all emergency response agencies which are likely to respond in an emergency with the location and layout of the facility, properties of hazardous waste managed at the facility and associated hazards, places where facility personnel will normally be working, entrances to and roads inside the facility, and possible evacuation routes as depicted and explained in G of the permit application;

(ii) Make arrangements with Ohio EPA emergency response teams, emergency response contractors, and equipment suppliers;

(iii) Make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and types of injuries or illnesses which could result from fires, explosions, or releases at the facility; and

(iv) Make agreements designating primary emergency authority to a specific police and a specific fire department and make agreements with any others to provide support to the primary emergency authority, where more than one police and fire department
may respond to an emergency.

(b) Where authorities decline to enter into such agreements or arrangements set forth in OAC Rule 3745-54-37(A), the Permittee must document the refusal in the operating record as required by OAC Rule 3745-54-37(B).

B.14 Implementation of Contingency Plan
OAC Rules 3745-54-51 and 3745-54-56

The Permittee must immediately carry out the provisions of the contingency plan and follow the emergency procedures described in OAC Rule 3745-54-56, whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment.

In regard to spills and related toxic gas releases, the plan must describe the criteria to be used by the emergency coordinator to determine when the plan will be implemented. At a minimum, the plan must be implemented in the following situations:

(a) Any fire involving hazardous waste; or

(b) Any explosion involving hazardous waste; or

(c) Any uncontrolled hazardous waste reaction that produces or has the potential to produce hazardous conditions, including noxious, poisonous, flammable and/or explosive gases, fumes, or vapors; harmful dust; or explosive conditions; or

(d) Any hazardous waste release, outside of a secondary containment system, that causes or has the potential to cause off-site soil and/or surface water contamination; or

(e) Any hazardous waste release that produces or has the potential to produce hazardous conditions, including noxious, poisonous, flammable and/or explosive gases, fumes, or vapors; harmful dust; or explosive conditions.

B.15 Content of the Contingency Plan
OAC Rule 3745-54-52

The Permittee must comply with OAC Rule 3745-54-52 and the contingency plan, as set forth in Section G of the permit application.

B.16 Contingency Plan - Released Material and Emergency Response Material and By-products
OAC Rule 3745-54-56(G)

(a) Immediately after an emergency, the emergency coordinator must provide for treating,
storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

(b) All liquid or solid material resulting from fire, explosion, released material or emergency response material and by-products that the Permittee is required to evaluate to determine whether such material is hazardous waste in accordance with OAC Rule 3745-52-11, must be collected and managed as a hazardous waste unless the Permittee can demonstrate that such waste is not hazardous in accordance with OAC Rule 3745-51-03(C) and (D).

B.17 Amendments to Plan
OAC Rule 3745-54-54

The Permittee must review the contingency plan at least annually and upon the occurrence of any event listed in OAC Rule 3745-54-54. If necessary or appropriate, the Permittee must amend the contingency plan as required by OAC Rule 3745-54-54 in accordance with OAC Rule 3745-50-51.

B.18 Copies of Plan
OAC Rule 3745-54-53

(a) The Permittee must comply with the requirements set forth in OAC Rule 3745-54-53 regarding contingency plan distribution. The Permittee must maintain at the facility a copy of the contingency plan and all revisions to the plan.

(b) The Permittee must, in accordance with OAC Rule 3745-54-53, submit a copy of the contingency plan to all local police departments, fire departments, hospitals and local emergency response teams that may be called upon to provide emergency services. The Permittee must notify such agencies and the local authorities, in writing, within ten (10) days of the effective date of any amendments of, revisions to, or modifications to the contingency plan.

(c) If the contingency plan is revised, that constitutes a permit modification pursuant to OAC Rule 3745-50-51.

B.19 Emergency Coordinator
OAC Rule 3745-54-55

The Permittee must comply with the requirements set forth in OAC Rule 3745-54-55 regarding the emergency coordinator.

B.20 Emergency Procedures
OAC Rule 3745-54-56

The Permittee must comply with the requirements regarding emergency procedures set forth in
OAC Rule 3745-54-56, Section G of the permit application and the terms and conditions of this permit.

B.21 Availability, Retention and Disposition of Records  
OAC Rule 3745-54-74

All records shall be furnished by the Permittee upon request to, and made available at all reasonable times for inspection by, Ohio EPA, in accordance with OAC Rule 3745-54-74.

B.22 Operating Record  
OAC Rule 3745-54-73

The Permittee must comply with the requirements set forth in OAC Rule 3745-54-73 regarding an operating record, including information to be recorded and the maintenance thereof.

B.23 Contingency Plan Records  
OAC Rule 3745-54-56(I)

The Permittee must note in the operating record the time, date, and details of any incident that requires the implementation of the contingency plan. Within fifteen (15) days after any such incident the Permittee must submit to the Director a written report of the incident containing the elements set forth in OAC Rule 3745-54-56(J).

B.24 Manifest System  
OAC Rules 3745-54-70, 3745-54-71, 3745-54-72, and 3745-54-76

(a) In managing waste at the facility the Permittee must comply with OAC Chapter 3745-52 and OAC Rules 3745-54-71, 3745-54-72 and 3745-54-76 with regard to the manifest system.

(b) Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved with fifteen (15) days after receiving the waste, the Permittee must submit a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest, to the Director in accordance with OAC Rule 3745-54-72.

(c) Unmanifested waste report. If the Permittee receives unmanifested waste which is not excluded from the manifest requirements of OAC Rule 3745-51-05, then the Permittee must submit an unmanifested waste report to the Director within fifteen (15) days after receipt of the waste. The report must include the information required under OAC Rule 3745-54-76.
B.25 Biennial Report and Additional Reports  
OAC Rules 3745-54-75 and 3745-54-77

The Permittee must comply with the report requirements set forth in OAC Rule 3745-54-75 and the additional report requirements set forth in OAC Rule 3745-54-77.

B.26 Closure Performance Standard  
OAC Rule 3745-55-11

During facility closure, the Permittee must implement the provisions of the closure plan found in Section I of the permit application in such a manner as to achieve compliance with OAC Rule 3745-55-11.

B.27 Closure Plan  
OAC Rules 3745-55-10, 3745-55-11 and 3745-55-13

The Permittee must implement those procedures detailed within Section I of the permit application, in accordance with OAC Rules 3745-55-10 through 3745-55-20.

B.28 Amendment of Closure Plan  
OAC Rules 3745-55-12 and 3745-50-51

Should a change in the facility closure plan become necessary, the Permittee must amend the closure plan in accordance with OAC Rules 3745-55-12(C) and 3745-50-51.

B.29 Content of Closure Plan  
OAC Rule 3745-55-12

The Permittee must maintain the closure plan at the facility which contains the elements set forth in OAC Rule 3745-55-12 and all elements required by the terms and conditions of this permit.

B.30 Notification of Closure  
OAC Rule 3745-55-12

The Permittee must notify the Director in writing at least 45 days prior to the date on which he expects to begin final closure of a facility, as required by OAC Rule 3745-55-12(D).

B.31 Time Allowed for Closure  
OAC Rule 3745-55-13

Within ninety (90) days after receiving the final volume of hazardous waste, the Permittee must remove from the facility, or treat or dispose of on-site, all hazardous waste in accordance with the closure plan. The Director may approve a longer closure period if the Permittee complies with
all applicable requirements for requesting a modification to the permit as set forth in OAC Rule 3745-55-13(A). The Permittee must complete all closure activities within one hundred eighty (180) days after receiving the final volume of hazardous waste in accordance with OAC Rule 3745-55-13. The Director may approve a longer closure period if the Permittee complies with all applicable requirements for requesting a modification to the permit as set forth in OAC Rule 3745-55-13 (B).

B.32 Disposal or Decontamination of Equipment, Structures, and Soils
OAC Rule 3745-55-14

(a) The Permittee must decontaminate or dispose of all contaminated facility equipment, structures, and soils, as required by OAC Rule 3745-55-14, the closure plan and the terms and conditions of this permit.

(b) The Permittee must notify the Ohio EPA, Southwest District Office, within five (5) working days prior to all rinsate and soil sampling.

B.33 Certification of Closure
OAC Rule 3745-55-15

The Permittee and a qualified professional engineer must certify that each hazardous waste management unit or the facility has been closed in accordance with the specifications in the closure plan and the terms and conditions of this permit, as required by OAC Rule 3745-55-15. The Permittee must furnish to the Director, upon request, documentation supporting the certification.

B.34 Reserved

B.35 Reserved

B.36 Cost Estimate for Facility Closure
OAC Rule 3745-55-42

(a) The Permittee's most recent closure cost estimate, prepared in accordance with OAC Rule 3745-55-42 is specified in Section I of the permit application.

(b) The Permittee must adjust the closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with OAC Rule 3745-55-43.

In case the Permittee is using the financial test or corporate guarantee, the Permittee must adjust the closure cost estimate for inflation within thirty (30) days after the close of the Permittee's fiscal year and before submission of updated information to the Director, as
specified in OAC Rule 3745-55-42(B).

(c) The Permittee must revise the closure cost estimate or post-closure cost estimate whenever there is a change in the facility's closure plan that increases the cost of closure, as required by OAC Rule 3745-55-42(C).

(d) The Permittee must submit to the Ohio EPA and keep at the facility the latest closure cost estimate as required by OAC Rule 3745-55-42(D) and (E).

B.37 Financial Assurance for Facility Closure
OAC Rule 3745-55-43

The Permittee must maintain continuous compliance with OAC Rule 3745-55-43 and provide documentation of financial assurance, which meets the requirements of OAC Rule 3745-55-51, in at least the amount of the cost estimates required by Permit Condition B.36.

B.38 Liability Requirements
OAC 3745-55-47

The Permittee must maintain continuous compliance with the requirements of OAC Rule 3745-55-47 and the documentation of liability by providing liability coverage which meets the requirements of OAC Rule 3745-55-51 for sudden accidental occurrences in the amount of at least $1 million per occurrence, with an annual aggregate of at least $2 million, exclusive of legal defense costs.

B.39 Incapacity of Owners or Operators, Guarantors, or Financial Institutions
OAC Rule 3745-55-48

The Permittee must comply with requirements set forth in OAC Rule 3745-55-48 regarding the incapacity of owners, operators, guarantors or financial institutions.

B.40 General Requirements for Land Disposal Restrictions
OAC Chapter 3745-270

The Permittee must comply with all applicable regulations regarding land disposal prohibitions and restrictions as required by OAC Chapter 3745-270.
C. CONTAINER STORAGE AND MANAGEMENT

The Permittee’s container storage area is located in the southeast corner of the building and is approximately 57 feet long by 34 feet wide. The Permittee is authorized to store the waste identified in permit condition C.3. The Permittee shall not store ignitable hazardous waste (EPA hazardous waste code D001) within the permitted container storage area. The permittee is limited to store 11,000 gallons, equivalent to 200 fifty-five (55) gallon containers, of hazardous waste at any given time in their permitted container storage, staging and loading/unloading areas. The Permittee’s secondary containment system capacity is almost five times greater than what permit condition C.7(b), below specifies (46% versus the 10% required).

C.1 Container Storage/Quantity Limitation

(a) The Permittee is authorized to store 11,000 gallons of hazardous waste at any given time in the permitted container storage area, staging area, and loading/unloading area designated in Section D, Figure D-5 of the Permittee’s permit application.

(b) For the purpose of compliance with the capacity limitation of this permit, each container will be considered to be storing an amount of hazardous waste equal to its capacity, regardless of the actual quantity stored in the container.

(c) Permit Conditions C.1(a) and C.2 shall not apply to the Permittee’s activities as a generator accumulating hazardous waste on-site in compliance with OAC Rule 3745-52-34 and 40 CFR Part 265, subparts AA, BB, and CC.

However, when accumulating waste within the permitted container storage area, in accordance with OAC Rule 3745-52-34 and 40 CFR Part 265, subparts AA, BB, and CC, the Permittee must not, for the total amount of hazardous waste stored and accumulated, exceed the maximum container storage inventory established under this permit condition.

C.2 Reserved

C.3 Waste Identification

The Permittee must store in containers only the hazardous waste codes specified below:

D002, D004-D011, D019, D022, D039, D040, F001, F002, F006, U080, U121, U210, U226, and U228
C.4 Condition of Containers
OAC Rule 3745-55-71

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 must transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit and the hazardous waste facility chapters of the OAC.

C.5 Compatibility of Waste with Containers
OAC Rule 3745-55-72

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

C.6 Management of Containers
OAC Rule 3745-55-73

(a) The Permittee must keep all containers closed during storage, except when it is necessary to add or remove waste, and must not open, handle, or store containers in a manner which may rupture the container or cause it to leak.

(b) In the event lab-pack wastes are generated they must be handled in compliance with applicable storage requirements.

(c) In the event lab-pack wastes are generated they must be packaged in drums containing absorbent material that is compatible with the waste.

C.7 Containment Systems
OAC Rule 3745-55-75

(a) The Permittee must maintain the containment system in accordance with the plans and specifications contained in Section D of the permit application.

(b) The Permittee must maintain the containment system as described in the permit application, designed with sufficient capacity to contain ten percent of the total volume of the containers or the volume of the largest container, whichever is greater. The containment system must be free of cracks and gaps and sufficiently impervious to contain leaks and spills and accumulated precipitation until the collected material is detected and removed.
(c) The base of the containment system must be sloped or the containment system must 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.

(d) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in Permit Condition C.7(b) above.

(e) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner. This time period is not to exceed twenty-four (24) hours from the time spilled and/or leaked waste is discovered to have reached the hazardous waste pad sump.

C.8 Reserved

C.9 Inspection Schedules and Procedures
OAC Rules 3745-54-15 and 3745-54-73

The Permittee must inspect the container storage area in accordance with the inspection schedule contained in Section F of the permit application and in accordance with OAC Rule 3745-54-15. The inspection schedule must be designed to detect for leaking containers, deteriorating containers, and/or containment systems. The Permittee must note the results of these inspections in the inspection log along with any remedial action taken.

Areas subject to spills, such as loading or unloading areas, shall be inspected daily when in use pursuant to the inspection procedure described in Section F of the permit application. The Permittee must maintain these inspection results in the facility operating record.

C.10 Recordkeeping
OAC Rule 3745-54-73

The Permittee must comply with all recordkeeping requirements of OAC Rule 3745-54-73 as part of the facility operating record.

C.11 Reserved

C.12 Special Container Provisions for Incompatible Waste
OAC Rules 3745-54-17(B) and 3745-55-77

(a) The Permittee must not store incompatible waste except in accordance with OAC Rules 3745-54-17(B) and 3745-55-77.
(b) The Permittee must not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

(c) The Permittee must separate or protect (by means of a dike, berm, wall, or other device) a storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments.

C.13 Reserved

C.14 Closure and Post-Closure

OAC Rules 3745-55-10 through 3745-55-20, and 3745-55-78

At closure of the container area, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment system, in accordance with the procedures in the closure plan set forth in Section I of the permit application.
MODULE D – RESERVED
MODULE E - CORRECTIVE ACTION REQUIREMENTS

On January 17, 1991, Ohio EPA performed a visual site inspection (VSI) of the Permittee to verify the location of all solid waste management units (SWMUs) and to document the units' condition. The information gathered during this VSI and a preliminary review (PR) of the Permittee's files was sent to U.S. EPA Region 5 on February 28, 1991. The Permittee conducted a release assessment (RA) in July of 1998. The Permittee submitted the results of their RA to USEPA Region 5 on October 22, 1998. The RA confirmed that contamination exists and further investigation was necessary. On December 23, 1996, Ohio became authorized for implementing the Corrective Action program through permits. Therefore, when Ohio EPA issued a renewal of the Permittee's Ohio Hazardous Waste Installation and Operation permit on December 22, 2000, Ohio had authorization for implementing the Permittee's Corrective Action. On December 14, 2005, Ohio EPA approved the RCRA Facility Investigation (RFI) Work Plan. A Draft RFI Report was submitted to Ohio EPA in October 2006. Ohio EPA provided comments on the Draft RFI Report in April 2007 requesting a letter. In March 2014, the Ohio EPA responded that the Permittee could proceed with the CMS Report. The CMS Report was submitted in October 2014. Comments were received from the Ohio EPA in June 2015. A plan to address the comments was provided to Ohio EPA in August 2015 and approved in September 2015. A Revised CMS Report was received in April 2016 and is currently under review.

E.1 Corrective Action at the Facility
OAC Rules 3745-50-10 & 3745-54-101

In accordance with OAC Rule 3745-50-10 waste management unit means any discernible unit at which solid waste, hazardous waste, infectious waste (as those terms are defined in ORC Chapter 3734), constructions and demolition debris (as defined in ORC Chapter 3714) industrial waste, or other waste (as those terms are defined in ORC Chapter 6111), has been placed at any time, irrespective of whether the unit was intended for the management of waste or hazardous waste. Such units include any area at a facility at which wastes have been routinely and systematically released. For the purpose of Corrective Action, facility is defined as all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. The terms Interim Measure (IM), RCRA Facility Investigation (RFI), Corrective Measures Study (CMS) and Corrective Measure Implementation (CMI) are defined in U.S. EPA's Corrective Action Plan (CAP) (OSWER Directive 9902.3-2A, May 1994).

The Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous wastes or hazardous constituents from any waste management units (WMUs) at the Facility, regardless of the time at which waste was placed in such units.

E.2 Corrective Action Beyond the Facility Boundary
OAC Rule 3745-54-101

The Permittee must implement Corrective Action beyond the Facility property boundary, where
necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of Ohio EPA that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the Facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RFI, CMS, and CMI phases, as determined to be necessary on a case-by-case basis.

E.3 Identification of WMUs
OAC Rules 3745-50-44(D) and 3745-54-101

A copy of table 1 from The Permittee's May 2005 RCRA Facility Investigation (RFI) Workplan is provided as Attachment A to the permit. Attachment A as provided lists all WMUs identified on January 17, 1990 during a Preliminary Review/Visual Site Inspection (PR/VSI). Details about their current status and whether they are included in the RFI Workplan are included in Attachment A. Additional information about the WMUs is located in Section J of the Part B Permit Application.

E.4 Reserved

E.5 RCRA Facility Investigation (RFI)
OAC Rule 3745-54-101


In the event of a newly discovered WMU, the Permittee must conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous wastes and hazardous constituents from all applicable WMUs identified in Permit Condition E.3 above and Permit Condition E.10. The major tasks and required submittal dates are shown below. The scope of work for each of the tasks is found in U.S. EPA's CAP.

(a) RFI Workplan

The Permittee submitted an RFI Workplan that was approved in December 2005. The Permittee must submit a written RFI Workplan to Ohio EPA within ninety (90) days after the effective date of this permit or, in case of a newly discovered waste management unit, on a time frame established by Ohio EPA.

(i) Within forty-five (45) days of receipt of any Ohio EPA comments on the RFI Workplan, the Permittee must submit either an amended or new RFI Workplan
that incorporates Ohio EPA's comments.

(ii) Ohio EPA will approve or modify and approve, in writing, the amended or new RFI Workplan. The RFI Workplan, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved RFI Workplan must be authorized by Ohio EPA.

(b) **RFI Implementation**

The Permittee implemented the RFI Workplan between May and August 2006. The Permittee must implement the RFI Workplan according to the terms and schedule in the approved RFI Workplan.

(c) **RFI Final Report**

The Permittee received approval for the RFI Report in June 2010. Within ninety (90) days after the completion of the RFI, the Permittee must submit an RFI Final Report to Ohio EPA. The RFI Final Report must describe the procedures, methods, and results of the RFI. The Final Report must contain adequate information to support further decisions concerning Corrective Action at the Facility.

(i) Within forty-five (45) days of receipt of any Ohio EPA comments on the RFI Final Report, the Permittee must submit either an amended or new RFI Final Report that incorporates Ohio EPA's comments.

(ii) Ohio EPA will approve or modify and approve, in writing, the amended or new RFI Final Report. The RFI Final Report, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved RFI Final Report must be authorized by Ohio EPA.

**E.6 Interim Measure (IM)**

Based on the RFI Final Report or other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require (or the Permittee may propose) the development and implementation of an IM (this may include an IM Workplan) at any time during the life of the permit to mitigate or eliminate a threat to human health or the environment. The Permittee must implement the IM upon a time frame established by Ohio EPA.
E.7 Determination of No Further Action

(a) Permit Modification

Based on the results of the completed RFI and other relevant information, the Permittee may submit an application to Ohio EPA for a permit modification under OAC Rule 3745-50-51 to terminate the Corrective Action tasks of the Schedule of Compliance. Other tasks identified in the Schedule of Compliance shall remain in effect. This permit modification application must conclusively demonstrate that there are no releases of hazardous waste or constituents from WMUs at the Facility that pose an unacceptable risk to human health and the environment.

If, based upon review of the Permittee’s request for a permit modification, the results of the completed RFI, and other information, Ohio EPA determines that releases or suspected releases which were investigated either are nonexistent or do not pose an unacceptable risk to human health and the environment, Ohio EPA will approve the requested modification. Decisions regarding the completion of RCRA Corrective Action and no further action may be made for the entire Facility, for a portion of the Facility, or for a specific unit or release.

(b) Periodic Monitoring

A determination of no further action shall not preclude Ohio EPA from requiring continued or periodic monitoring of air, soil, ground water, or surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that a potential or an actual release of hazardous waste or constituents exists.

(c) Further Investigations

A determination of no further action shall not preclude Ohio EPA from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or potential release from a WMU at the Facility may pose an unacceptable risk to human health or the environment. In such a case, Ohio EPA shall initiate a modification to the terms of the permit to rescind the determination made in accordance with Permit Condition E.7(a). Additionally, in the event Ohio EPA determines that there is insufficient information on which to base a determination, the Permittee, upon notification, is required to develop a Work Plan and upon Ohio EPA approval of that Work Plan, perform additional investigations as needed.

E.8 Corrective Measures Study (CMS)

The Ohio EPA provided a RCRA Facility Report Approval letter in June 2010 instructing the Permittee to submit a Corrective Measures Study Work Plan (CMS-WP). The CMS-WP was
submitted to the Ohio EPA in September 2010. The Ohio EPA commented on the Work Plan in November 2010 and a revised plan was submitted in January 2011. The Ohio EPA approved the CMS – WP in January 2011. In March 2012, Ohio EPA requested additional information regarding several items mostly relating to groundwater monitoring prior to the completion of the CMS Report. This information was provided in a May 2012 letter. In March 2014, the Ohio EPA responded that the Permittee could proceed with the CMS Report. The CMS Report was submitted in October 2014. Comments were received from the Ohio EPA in June 2015. A plan to address the comments was provided to Ohio EPA in August 2015 and approved in September 2015. A Revised CMS Report was received in April 2016 and is currently under review.

If Ohio EPA determines, based on the results of the RFI and any other relevant information, that corrective measures are necessary, Ohio EPA will notify the Permittee in writing that the Permittee must conduct a CMS either as described below or as described in Ohio EPA’s notification to the Permittee. The purpose of the CMS will be to develop and evaluate the corrective action alternative(s) and to outline one or more alternative corrective measure(s) that will satisfy the performance objectives specified in Permit Condition E.9.

(a) CMS Workplan

The Permittee received approval of the CMS Workplan in January 2011. The Permittee must submit a written CMS Workplan to Ohio EPA within ninety (90) days from the notification by Ohio EPA of the requirement to conduct a CMS.

(i) Within forty-five (45) days of receipt of any Ohio EPA comments, the Permittee must submit either an amended or new CMS Workplan that incorporates Ohio EPA’s comments.

(ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMS Workplan. The CMS Workplan, as approved or as modified and approved, must be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved CMS Workplan must be authorized by Ohio EPA.

(b) CMS Workplan Implementation

The Permittee initiated work under the CMS Workplan after approval in January of 2011. In March 2012, Ohio EPA requested additional information prior to the completion of the CMS. The information was provided in May 2012. A CMS Final Report was submitted in October 2014. A supplemental CMS Workplan was approved in September 2015. Work is ongoing to complete the CMS.

The Permittee must implement the CMS Workplan according to the terms and schedule in the approved CMS Workplan.
(c) CMS Final Report

Within ninety (90) days after the completion of the CMS, the Permittee must submit a CMS Final Report to Ohio EPA. The CMS Final Report must summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative.

(i) Within forty-five (45) days of receipt of any Ohio EPA comments, the Permittee must submit either an amended or new CMS Final Report that incorporates Ohio EPA’s comments.

(ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMS Final Report. The CMS Final Report, as approved or as modified and approved, must be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved CMS Final Report must be authorized by Ohio EPA.

E.9 Corrective Measures Implementation (CMI)

Based on the results of the CMS, the Permittee must implement one or more of the Corrective Measures authorized by Ohio EPA. Ohio EPA will authorize one or more of the Corrective Measures in the CMS, and will notify the Permittee in writing of the decision. The Corrective Measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent[s]); and (4) comply with all applicable standards for management of wastes.

If two or more of the Corrective Measures studied meet the threshold criteria set out above, Ohio EPA will authorize the Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the Corrective Measure will reduce the toxicity, mobility or volume of contamination; (3) the Corrective Measure's short-term effectiveness; (4) the Corrective Measure's implementability; and (5) the relative cost associated with the alternative.

(a) Permit Modification

Ohio EPA will initiate a permit modification, as provided by OAC Rule 3745-50-51 to require implementation of the corrective measure(s) authorized.

The Permittee must not implement the corrective measure until the permit is modified pursuant to OAC Rule 3745-50-51.
Within forty-five (45) days after receiving approval of the CMI, the Permittee must provide financial assurance in the amount necessary to implement the corrective measure(s) as required by OAC Rule 3745-54-101 (B) and (C).

E.10 Newly Identified WMUs or Releases
OAC Rule 3745-54-101

(a) General Information

The Permittee must submit to Ohio EPA, within thirty (30) days of discovery, the following information regarding any new WMU identified at the Facility by Ohio EPA or the Permittee:

(i) The location of the unit on the site topographic map;
(ii) Designation of the type of unit;
(iii) General dimensions and structural description (supply any available drawings);
(iv) When the unit was operated; and
(v) Specification of all waste(s) that have been managed at the unit.

(b) Release Information

The Permittee must submit to Ohio EPA, within forty-five (45) days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing WMU.

E.11 Corrective Action for Newly Identified WMUs and Releases
OAC Rule 3745-54-101

If Ohio EPA determines that a RFI is required for newly identified WMUs, the Permittee must submit a written RFI Workplan to Ohio EPA upon a time frame established in written notification by Ohio EPA in accordance with Permit Condition E.5. This determination will be made based on the information submitted in accordance with Permit Condition E.10.

Further investigations or corrective measures will be established by Ohio EPA. The Permittee must make such submittal in accordance with time frames established by Ohio EPA.
E.12 **Completion of Corrective Action**

OAC Rule 3745-54-101

After completing Corrective Action as necessary to protect human health and the environment for all releases of hazardous wastes or hazardous constituents from any WMUs at the Facility, the Permittee shall submit a Corrective Measures Completion of Work (CMCW) Report. The CMCW Report shall document that Corrective Action construction is complete, cleanup objectives and standards have been met, and any releases of hazardous waste or constituents no longer pose an unacceptable risk to human health and the environment. The CMCW Report may be submitted for any part of the Facility for which corrective measures are complete, or for the entire Facility. The CMCW Report must be submitted as a request for permit modification pursuant to OAC Rule 3745-50-51.

E.13 **Documents Requiring Professional Engineer Stamp**

ORC Section 4733.01

Preparation of the following Corrective Action documents constitutes the "practice of engineering" as defined by ORC Section 4733.01:

- Final Interim Measures Report
- Corrective Measures Final Design
- Corrective Measures Construction Completion Report
- Corrective Measures Attainment of Groundwater Performance Standards Report
- Corrective Measures Completion of Work Report

As such, the Permittee must ensure that these documents, as submitted to Ohio EPA, are stamped by a Professional Engineer licensed to practice in the State of Ohio supplemental RFI Investigation.
<table>
<thead>
<tr>
<th>SWMU No.</th>
<th>SWMU Description</th>
<th>Evidence of Releases (PR/VSI)</th>
<th>PR/VSI Recommendation</th>
<th>Actions Taken</th>
<th>Current Status</th>
<th>Included in RFI</th>
<th>Reason Exclusion</th>
<th>Comments</th>
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<td>1</td>
<td>Pad Vehicle Entrance and Backhoe Storage Area</td>
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<td>Investigated under RA</td>
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<td>Backhoe</td>
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<td>None required</td>
<td>Closed</td>
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<td>Storage Area Pad</td>
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</tr>
<tr>
<td>4</td>
<td>Hazardous Waste Drum Storage Area Sump</td>
<td>No</td>
<td>None</td>
<td>None required</td>
<td>Active</td>
<td>No</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Hazardous Waste Drum Storage Area</td>
<td>No</td>
<td>Determine Integrity</td>
<td>Investigated under RA</td>
<td>Active</td>
<td>No</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Area Loading/ Unloading Pad</td>
<td>No</td>
<td>None</td>
<td>None required</td>
<td>Active</td>
<td>Yes</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Solid Waste Bin</td>
<td>No</td>
<td>None</td>
<td>None required</td>
<td>Closed</td>
<td>No</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Nonhazardous Oils and Water Tank/ Raised Dock</td>
<td>No</td>
<td>None</td>
<td>None required</td>
<td>Active</td>
<td>No</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Floor-Plant Process Area</td>
<td>No</td>
<td>None</td>
<td>None required</td>
<td>Active</td>
<td>No</td>
<td>No evidence of release since PR/VSI.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Short Floor Drain-Plant</td>
<td>No</td>
<td>Determine Integrity</td>
<td>Investigated under RA</td>
<td>Active</td>
<td>Yes</td>
<td>SWMUs 10, 11, and 12 combined as AOC1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Long Floor Drain-Plant Process</td>
<td>No</td>
<td>Determine Integrity</td>
<td>Investigated under RA</td>
<td>Active</td>
<td>Yes</td>
<td>SWMUs 10, 11, and 12 combined as AOC1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Sump – Plant Process Area</td>
<td>No</td>
<td>Determine Integrity</td>
<td>Investigated under RA</td>
<td>Active</td>
<td>Yes</td>
<td>SWMUs 10, 11, and 12 combined as AOC1</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Venting System – Plant Process area</td>
<td>No</td>
<td>Determine Integrity</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Northeast Still</td>
<td>No</td>
<td>None</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Central Still</td>
<td>No</td>
<td>None</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Northwest Still Piping - from Floor Drains and Laboratory Sink to Sump ((SWMU 12))</td>
<td>No</td>
<td>None</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Stills (2) Stored in Warehouse</td>
<td>No</td>
<td>None</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Still, Formerly Used at the Facility</td>
<td>No</td>
<td>None</td>
<td>SWMU closed in 1993</td>
<td>Closed</td>
<td>No</td>
<td>SWMU eliminated when recycling operations ceased in 1993</td>
<td></td>
</tr>
</tbody>
</table>