



Ohio Hazardous Waste Facility Installation and Operation Permit Renewal

Division of Materials and Waste Management

Permittee: Clean Harbors Recycling Services of Ohio, LLC U.S. EPA ID: OHD980587364

Facility Name: Clean Harbors Recycling Services of Ohio, LLC

Mailing Address: 581 Milliken Drive SE

City: Hebron State: OH Zip: 43025-9657

Facility Street Address: 581 Milliken Drive SE

City: Hebron State: OH Zip: 43025-9657

Operator Name: Clean Harbors Recycling Services of Ohio, LLC

Mailing Address: 581 Milliken Drive SE

City: Hebron State: OH Zip: 43025-9657

Owner Name: Clean Harbors Recycling Services of Ohio, LLC

Mailing Address: 581 Milliken Drive SE

City: Hebron State: OH Zip: 43025-9657

Authorized Activities

In reference to the application of Clean Harbors Recycling Services of Ohio, LLC 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 and Tanks
- Treatment of Hazardous Waste in Tanks
- Closure/Post Closure
- Corrective Action

Permit Approval

Entered into the Journal of the Director on:

[Click here to enter a date.](#)

Date:

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.

MODULE A - GENERAL PERMIT CONDITIONS

A. GENERAL PERMIT CONDITIONS

A.1 Effect of Permit

ORC Sections 3734.02 (E) and (F) and 3734.05
Ohio Administrative Code (OAC) Rule 3745-50-58(G)

- (a) The Permittee is authorized to store hazardous waste in containers and tanks 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 December 19, 2014 and last updated on April 10, 2015, 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 not 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 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(J)

(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 Appendix I of OAC Rule 3745-51-20, Laboratory Methods. 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, II, IIA, IIB, III and IIIA, 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 not 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 Revitalization 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 and the Division of Materials and Waste Management, Central 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

- (a) The fees for the off-site disposal and/or treatment of hazardous wastes, calculated pursuant to OAC Rules 3745-50-33 and 3745-50-35, and payable to the Treasurer of the State, must be submitted to the Director on or before the fortieth day after the end of the month to which the return applies. The permittee subject to these requirements must prepare and file with the director monthly returns showing the total tonnage disposed and/or treated and the total amount of the fee to be submitted to the director.
- (b) 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) The previous permit required submittal of risk assessment report, for the development of risk-based cleanup levels for soil and groundwater at the facility. This report was received by Ohio EPA on June 4, 2013. The Permittee must submit, within sixty (60) days of Ohio EPA approval of the risk assessment report referenced above, a Class 3 permit modification request to Ohio EPA in accordance with OAC Rule 3745-50-51. This modification must integrate the ground water monitoring requirements for the UST post closure care and site-wide corrective action at the facility. The modification must establish a ground water corrective action monitoring program that is effective in determining compliance with the ground water containment standards at the point of compliance, and must include the following elements:
 - (i) The program must add any confirmed, non-background constituents not identified in Condition J.2(a) to Section 4.0 of Appendix 5.1 of the Permittee's Part B permit application and implement any changes to current remedial measures necessary to effectively address newly identified constituents detected during the sampling for a modified list of appendix to OAC Rule 3745-54-98 constituents (VOCs, SVOCs, and metals) completed in the following wells as of the date of the Tier II data validation completion (October 19, 2011):

H-1S, H-1DD, H-4SR, H-7S, H-8S, H-9S, H-10S, H-11S, H-12S, H-12D, H-14S, H-15D, H-19S, H-20S, and H-22D.

- (ii) The program must define the extent of contamination;
- (iii) The program must establish ground water containment standards;
- (iv) The program must establish objective criteria or measures by which the effectiveness of the corrective action program will be regularly assessed;
- (v) The program must identify the monitoring wells to be sampled and the parameters to be analyzed for during each ground water sampling event; and
- (vi) The program must include updates to the Operation and Maintenance Plans (O&M plans) referenced in Permit Conditions E.9(a)(i) and (ii), Corrective Measures Implementation. The O&M plans must be revised to include (1) contingency procedures to address system breakdowns and operational problems; (2) alternate procedures to be implemented if the corrective measure suffers complete failure and release or threatened releases of hazardous waste or constituents may endanger human health and the environment or exceed media cleanup standards; (3) notification procedures in the event of a major breakdown or complete failure of the corrective measure; and (4) procedures to be implemented if the corrective measure is experiencing major operational problems, is not performing to design specifications or will not achieve the cleanup goals in the expected time frame (including that design plans would be developed for the secondary measure if the primary corrective measure fails). The O&M plans must describe the process and criteria for determining when corrective measures have achieved media cleanup goals and when maintenance and monitoring may cease.

(vii) The class 3 modification must also include the following items:

- a. Updated Integrated Post-Closure/Corrective Action Cost Estimate
OAC Rule 3745-54-101(B)

Section 9 of the permit application containing the financial assurance mechanism for closure must be updated to include a copy of the current post-closure/corrective action cost estimate as set forth in OAC Rules 3745-54-101(B) and 3745-55-44.

- b. Updated Financial Assurance Mechanism for Post-Closure and Site-Wide Corrective Action
OAC Rule 3745-54-101(B)

Section 9 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 Rule 3745-54-101(B), 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 post closure care/corrective action cost estimate.

- (b) The Permittee must submit, within sixty (60) days after permit journalization, a permit modification request to Ohio EPA in accordance with OAC Rule 3745-50-51 to incorporate the following documents into the permit application:

- (i) Updated Closure and Post-Closure Care Cost Estimates
OAC Rules 3745-55-42 and 3745-55-44

Section 9 of the permit application containing the financial assurance mechanism for closure and post-closure care must be updated to include a copy of the current closure cost estimates as set forth in OAC Rules 3745-55-42 and 3745-55-44.

- (ii) Updated Financial Assurance Mechanism for Closure
OAC Rule 3745-55-43 and 3745-55-45

Section 9 of the permit application containing the financial assurance mechanism for closure and post-closure care must be updated to include a copy of the current financial assurance mechanism, as set forth in OAC Rules 3745-55-43 and 3745-55-45, 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 and post-closure care cost estimates.

During the life of the permit the facility may change the financial assurance mechanism as stated in OAC Rules 3745-55-43 and 3745-55-45. The facility 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 and 3745-55-45.

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

Section 9 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 facility may change the mechanism used to demonstrate liability coverage as stated in OAC Rule 3745-55-47. The facility 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.

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 an independent, registered 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 and post-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, and;
 - (xi) Ground water monitoring results and reports, as required by OAC Rule 3745-54-74.
- (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 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 years thereafter.

MODULE B - GENERAL FACILITY CONDITIONS

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 162,129 tons of hazardous waste 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 it 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 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 an owner or operator treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under OAC Rule 3745-55-13(D), the owner or operator 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 Chapters 3745-54 to 3745-57, 3745-205, and 3745-270 of the Administrative Code.
- (b) The Permittee must follow the procedures described in the waste analysis plan found in Section 3 of the permit application and the terms and conditions of this permit.
- (c) The Permittee must verify the analysis of each waste stream annually as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the Director. At a minimum, the Permittee must maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of

sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee must inform the laboratory in writing that it must operate under the waste analysis conditions set forth in 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)(1) and (2) and (C) and Section 6.1 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 6.2 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 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 8 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

- (a) The Permittee must comply with the requirements of OAC Rule 3745-54-17 and must follow the procedures for handling ignitable, reactive, and incompatible wastes set forth in Section 6.5 of the permit application.
- (b) The Permittee must provide electrical grounding for all containers, tanks, and transport vehicles during all operations involving the handling of ignitable or reactive wastes.
- (c) The Permittee must provide, and require the use of, spark proof tools during all operations involving the handling of all ignitable or reactive wastes.
- (d) The Permittee must prohibit smoking and open flames in each area where ignitable, reactive, or incompatible hazardous wastes are managed and must post appropriate signs.
- (e) Reserved

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 7 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 6.2 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 6.3 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 Section 7 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 7 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 Rules 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) The Permittee must, in accordance with OAC Rule 3745-54-53, submit a copy of the contingency plan to the Ohio EPA's Division of Environmental Response and Revitalization.

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 7 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(J)

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 9 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 9 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 at the facility the closure plan 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 forty-five (45) days prior to the date on which it 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 Central District Office within five (5) working days prior to all rinseate and soil sampling.

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

The Permittee and an independent, registered 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 Survey Plat
OAC Rule 3745-55-16

The Permittee must submit a survey plat to the Director and the local zoning authority not later than the submittal of certification of closure of each hazardous waste disposal unit, in accordance with OAC Rule 3745-55-16.

B.35 General Post-Closure Requirements
OAC Rules 3745-55-17, 3745-55-18, 3745-55-19 and 3745-55-20

(a) Post-Closure Care Period

The Permittee must begin post-closure care for each hazardous waste management unit closed as a landfill after completion of closure of the unit and continue for 30 years after that date. Post-closure care must be in accordance with OAC Rule 3745-55-17 and the post-closure plan.

(b) Post-Closure Security

The Permittee must maintain security at the facility during the post-closure care period, in accordance with the post-closure plan and OAC Rule 3745-55-17(B).

(c) Amendment to Post-Closure Plan

The Permittee must amend the post-closure plan, when necessary, in accordance with OAC Rule 3745-55-18(D).

(d) Post-Closure Notices

- (i) Not later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the Permittee must submit to the Director and the local zoning authority records of the type, location, and quantity of hazardous waste disposed of within each cell or disposal unit, in accordance with OAC Rule 3745-55-19(A).
- (ii) Within sixty (60) days of certification of closure of the first hazardous waste disposal unit and within sixty (60) days of certification of closure of the last hazardous waste disposal unit, the Permittee must do the following:
 - (1) Record a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, which contains the information required by OAC Rule 3745-55-19(B)(1).
 - (2) Submit to the Director a certification that the Permittee has recorded the notation and submit a copy of the document in which the Permittee placed the notation.
 - (3) The Permittee must request and obtain a permit modification prior to post-closure removal of hazardous wastes, hazardous waste residues, liners, or contaminated soils, in accordance with OAC Rule 3745-55-19(C).

(e) Certification of Completion of Post-Closure Care

Not later than sixty (60) days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee must certify that the post-closure care period was performed in accordance with the specifications in the post-closure plan and the terms and conditions of this permit, as required by OAC Rule 3745-55-20. The Permittee must furnish to the Director, upon request, documentation supporting the certification.

B.36 Cost Estimate for Facility Closure, Post Closure and Corrective Action
OAC Rules 3745-55-11(B), 3745-55-42 and 3745-55-44

- (a) The Permittee's most recent closure, post closure, and corrective action cost estimates, prepared in accordance with OAC Rules 3745-55-11(B), 3745-55-42, and 3745-55-44, are specified in Section 9 of the permit application.
- (b) The Permittee must adjust the closure, post closure, and corrective action cost estimates for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with OAC Rules 3745-55-11(B), 3745-55-43 and 3745-55-45.

In case the Permittee is using the financial test or corporate guarantee, the Permittee must adjust the closure cost estimate, post-closure cost estimate, and corrective action 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) and 3745-55-44(B).

- (c) The Permittee must revise the closure cost estimate, post-closure cost estimate, or corrective action cost estimate whenever there is a change in the facility's closure plan, post-closure plan, or corrective action plan that increases the cost of closure, post-closure, or corrective action, as required by OAC Rules 3745-55-11(B), 3745-55-42(C) or 3745-55-44(C).
- (d) The Permittee must submit to Ohio EPA and keep at the facility the latest closure cost estimate, post-closure cost estimate, and corrective action cost estimate as required by OAC Rules 3745-55-11(B), 3745-55-42(D) and (E) and 3745-55-44(D) and (E).

B.37 Financial Assurance for Facility Closure, Post Closure and Corrective Action
OAC Rules 3745-55-43, 3745-55-45 and 3745-55-46

The Permittee must maintain continuous compliance with OAC Rules 3745-55-43, 3745-55-45, and 3745-55-46 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.

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MODULE C - CONTAINER STORAGE AND TREATMENT

C. CONTAINER STORAGE AND MANAGEMENT

The Permittee operates five (5) storage areas for the storage of hazardous waste in containers (S01). The maximum amount of container storage allowed in Container Storage Area No. 1 is 158,400 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2B is 6,150 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2E is 8,070 gallons. The maximum amount of container storage allowed in Truck Station No. 1 is 13,200 gallons and the maximum amount of container storage allowed in Truck Station No. 2 is 13,200 gallons.

Container Storage Area No. 1 is constructed of a reinforced concrete pad with twelve inch high curbs at the east and west ends, and variable height curbs along the north and south ends (six inch minimum in the middle and increasing as the elevation of the pad decreases).

The secondary containment capacity of Container Storage Area No. 1 is 33,690 gallons. The pad is sloped with a one sixteenth-inch per foot slope to direct the flow of any leakage or spillage to sumps located at the east and west ends of the storage area. Each sump is twenty-four inches in diameter by two feet deep and has a capacity of 47 gallons. This storage area is covered by a roof to prevent precipitation from entering the storage area. Precipitation run-on is controlled by the dike surrounding the storage area.

Container Storage Area No. 2 is constructed of reinforced concrete and is divided into areas 2B, 2C, 2D and 2E. These areas are within an enclosed building, and there is a concrete berm to keep precipitation run-on away from the building. Areas 2C and 2D are to be used for container staging only, and are not permitted for hazardous waste storage. Containers may be staged in areas 2C and 2D for up to 24 hours before they must be moved to a permitted storage area. Area 2B has a secondary containment capacity of 705 gallons, while Area 2E has a secondary containment capacity of 808 gallons.

Truck Station 1 and 2 are constructed of reinforced concrete with an average curb height of 4.5 inches. The floor slopes to a 43 cubic foot catch basin, and a 16 foot by 1 foot trench runs across each bay to the sump. The average depth of the trench is 4 inches. Truck Station No. 1 has a secondary containment capacity of 5,382 gallons and Truck Station No. 2 has a secondary containment capacity of 5,382 gallons. These areas are within an enclosed building, and the driveway into and out of the building slopes upward to keep precipitation run-on out of each area.

The waste codes listed in Permit Condition C.3(a) may be stored in containers. Ignitable waste is only permitted to be stored in Container Storage Areas No. 1, No. 2B, and No. 2E. The types and sizes of containers are described in Section 4 of the permit application.

C.1 Container Storage/ Quantity Limitation

- (a) The Permittee is authorized to store 199,020 gallons of hazardous waste at any given time in the Permitted Container Storage Areas No. 1, No. 2B, No. 2E, Truck Station No.1 and Truck Station No. 2.
- (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:

D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043, F001, F002, F003, F004, F005, F006, K006, K016, K022, K030, K048, K049, K050, K051, K052, K060, K085, K086, K087, K095, K096, K105, K141, K142, K143, K144, K145, K147, K148, U002, U003, U019, U031, U037, U044, U051, U052, U055, U056, U057, U068, U069, U070, U071, U072, U075, U077, U078, U079, U080, U083, U084, U108, U110, U113, U117, U118, U121, U124, U140, U154, U159, U161, U162, U165, U169, U171, U188, U191, U196, U210, U211, U213, U220, U226, U227, U228, and U239.

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 4 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 sumps.

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 6 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 6 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 Special Container Provisions for Ignitable or Reactive Waste
OAC Rules 3745-54-17 and 3745-55-76

- (a) The Permittee must not store ignitable or reactive waste except in accordance with OAC Rules 3745-54-17 and 3745-55-76.
- (b) The Permittee must not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.
- (c) The Permittee must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and shall follow the storage procedures specified in Section 6.5 the permit application.

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 9 of the permit application.

MODULE D - TANK STORAGE, TREATMENT, AND MANAGEMENT

D. MODULE HIGHLIGHTS

The Permittee operates four (4) areas for the storage of hazardous waste in tanks (SO2). Tank Farm 1 is used for flammable waste solvents and storage is permitted in 30 tanks (595,000 gallons). Tank Farm 2 is used for chlorinated waste solvents and storage is permitted in 37 tanks (525,000 gallons). Tank Farms 4 and 6 are used for other types of hazardous waste solvents; storage is permitted in 4 tanks (60,000 gallons) in Tank Farm 4 and 4 tanks (57,500 gallons) in Tank Farm 6. In addition, fourteen (14) of the above-mentioned tanks (2 in Tank Farm 1, 6 in Tank Farm 2, 4 in Tank Farm 4, and 2 in Tank Farm 6) are also permitted for treatment for fuel blending. All tanks are considered existing tanks based on their ages and/or installation dates (1984 or 1986; see Attachment 4-5 of the permit application).

All tanks and ancillary equipment are above-ground. Transfers of waste are monitored through a master control board that continuously monitors the level in each tank. This control board is equipped with warning lights tied to high-level alarms in each tank set at 95% of tank capacity. When 95% of tank capacity is reached, all high volume pumps are disabled. Low volume pumps do not automatically shut down and must be manually shut off at the pump location after the high-level alarm sounds. Level gauges are present on each tank and level readings are recorded in daily facility records. All tanks are vented directly to the atmosphere through pressure/vacuum vents. Tanks for chlorinated organics are equipped with conservation vents to prevent influx of water and HCl generation.

Each tank system, except for some ancillary equipment, is contained by concrete external liners. The net secondary containment capacities per Attachment 4-6 of the permit application are: 62,588 gallons on the east side and 73,958 gallons on the west side for Tank Farm 1; 133,067 gallons for Tank Farm 2; 31,335 gallons for Tank Farm 4; and, 23,952 gallons for Tank Farm 6. All concrete liners have been provided an impermeable coating that is compatible with the wastes stored. All waste codes listed in Permit Condition D.1(c) may be stored in tanks.

D.1 Tank Storage Quantity Limitation/Waste Identification

- (a) The Permittee may store a total volume of 1,237,500 gallons of hazardous waste in 75 tanks, subject to the terms of this permit and as detailed in the table below.

The Permittee shall store in tanks only the hazardous waste codes specified in the permit application and summarized below:

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 1 32	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 33	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 1 34	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 35	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 36	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 37	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 39	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 40	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 41	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 42	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 43	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 44	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 45	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 49	20,000	10 ft 6 in (Diam) x 32 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 50	20,000	10 ft 6 in (Diam) x 32 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 51	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 52	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 1 53	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 56	15,000	10 ft 6 in (Diam) x 24 ft	8.25 ft skirt CS-CB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 57	15,000	10 ft 6 in (Diam) x 24 ft	CS-CB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 58	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 59	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 60	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 61	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 63	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 65	15,000	10 ft 6 in (Diam) x 24 ft	8.25 ft skirt CS-CB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 66	15,000	10 ft 6 in (Diam) x 24 ft	8.25 ft skirt CS-CB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 67	30,000	12 ft (Diam) x 35 ft	CS-FB	Mineral Spirits Ignitable	See Permit Condition D.1(c), below
Tank Farm 1 68	30,000	12 ft (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below
Tank Farm 1 69	30,000	12 ft 6 in (Diam) x 35 ft	CS-FB	Flammable/Ignitable Solvents	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 2 80	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 81	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 82	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 83a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 83b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 84a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 84b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 85	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 86	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 2 87	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 88	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 89a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 89b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 90	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft CS skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 91	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 92a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 92b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 2 93	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 94a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 94b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 95	15,000	10 ft 6 in (Diam) x 24 ft	8 ft CS skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 100	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft CS skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 101	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 102a	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 2 102b	7,500	10 ft 6 in (Diam) x 11 ft + 5.25 ft (cone) Total tank height is 32 ft 6 in	8 ft skirt CS-CB/PB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 2 103	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft CS skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 104	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 105	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 106	30,000	12 ft (Diam) x 35 ft	CS-FB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 107	30,000	12 ft (Diam) x 35 ft	SS-FB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 108	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft CS skirt SS-FB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 109	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft skirt SS-DB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 110	15,000	10 ft 6 in (Diam) x 24 ft	8 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 111	30,000	12 ft (Diam) x 35 ft	SS-FB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 112	30,000	12 ft (Diam) x 35 ft	SS-FB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 113	15,000	10 ft 6 in (Diam) x 24 ft	7.8 ft CS skirt SS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 2 114	15,000	10 ft 6 in (Diam) x 24 ft	6.5 ft skirt CS-CB	Chlorinated Solvents	See Permit Condition D.1(c), below
Tank Farm 4 203	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 4 204	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below

Tank Farm No. & Tank No.	Capacity (Gallons)	Dimensions of Tank	Type of Construction	Typical Description of Hazardous Waste	Hazardous Waste No.
Tank Farm 4 205	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 4 209	15,000	10 ft 6 in (Diam) x 24 ft 6 in	8 ft skirt CS-CB	Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 6 96	12,000	11 ft (Diam) x 17 ft	CS-FB	Mineral Spirits Ignitable Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 6 97	20,000	12 ft (Diam) x 24 ft	CS-FB	Mineral Spirits Ignitable Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Tank Farm 6 98	20,000	10 ft 6 in (Diam) x 32 ft 6 in.	CS-FB	Mineral Spirits Ignitable Chlorinated Solvents Toxic	See Permit Condition D.1(c), below
Bin #2	5,500	6.6 ft x 12 ft x 9.5 ft deep	CS-Square	Toxic	See Permit Condition D.1(c), below
CS - CARBON STEEL SS = STAINLESS STEEL PB = PIGGY-BACK			CB - CONE BOTTOM FB - FLAT BOTTOM DB - DISHED BOTTOM L = LINED		

(b) During any calendar year, the Permittee must not manage through tank storage hazardous waste in excess of the maximum annual quantity set forth in Permit Condition B.1(b).

(c) The Permittee shall store in tanks only the hazardous waste codes specified in the permit application and summarized below:

D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043, F001, F002, F003, F004, F005, F006, K006, K016, K022, K030, K048, K049, K050, K051, K052, K060, K085, K086, K087, K095, K096, K105, K141, K142, K143, K144, K145, K147, K148, U002, U003, U019, U031, U037, U044, U051, U052, U055, U056, U057, U068, U069, U070, U071, U072, U075, U077, U078, U079, U080, U083, U084, U108, U110, U113, U117, U118, U121, U124, U140, U154, U159, U161, U162, U165, U169, U171, U188, U191, U196, U210, U211, U213, U220, U226, U227, U228, and U239.

D.2 Limitations on Treatment of Hazardous Waste in Tanks

(a) The Permittee is authorized to treat hazardous waste in the tanks specified in the table below. The Permittee shall treat in tanks only the hazardous waste codes specified in the permit application and summarized below:

Tank No.	Capacity (Gallons)	Treatment Type	Dimensions of Tank	Secondary Containment Volume(Gallons)	Description of Hazardous Waste	Hazardous Waste No.
37	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	62,588	Mineral Spirits Ignitable	See Permit Condition D.1(c)
45	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	62,588	Mineral Spirits Ignitable	See Permit Condition D.1(c)
81	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents	See Permit Condition D.1(c)
82	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents	See Permit Condition D.1(c)
86	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
87	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
91	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
95	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	133,067	Chlorinated Solvents	See Permit Condition D.1(c)
203	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	31,335	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
204	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	31,335	Chlorinated Solvents Toxic	See Permit Condition D.1(c)

Tank No.	Capacity (Gallons)	Treatment Type	Dimensions of Tank	Secondary Containment Volume(Gallons)	Description of Hazardous Waste	Hazardous Waste No.
205	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	31,335	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
209	15,000	Fuel Blending	10.5 ft (Diam) x 24.5 ft	31,335	Chlorinated Solvents Toxic	See Permit Condition D.1(c)
97	20,000	Fuel Blending	12 ft (Diam) x 24 ft	23,952	Mineral Spirits Ignitable Chlorinated Solvents Toxic	See Permit Condition D.1(c)
98	20,000	Fuel Blending	10.5 ft (Diam) x 32.5 ft	23,952	Mineral Spirits Ignitable Chlorinated Solvents Toxic	See Permit Condition D.1(c)

(b) The provision of Condition D.2(a) shall not apply to the Permittee's activities as a generator treating hazardous waste in tanks on-site in compliance with the provisions of OAC Rule 3745-52-34.

D.3 Reserved

D.4 Containment and Detection of Releases.
OAC Rule 3745-55-93

(a) New Tank Systems

The Permittee must construct and operate the secondary containment system in accordance with the requirements of OAC Rules 3745-55-93(B) through (F), and Section 4.3 of the permit application.

(b) Existing Tank Systems with Secondary Containment

The Permittee must design, construct, and operate the secondary containment system in accordance with the detailed design plans and descriptions contained in Section 4 of the permit application. If needed, repair of secondary containment must be performed as soon as concrete surface temperatures exceed 38° F for the applicable curing period. Currently all permitted storage tanks at the facility are existing tanks.

D.5 Operating Requirements
OAC Rule 3745-55-94

- (a) The Permittee must not place hazardous wastes or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail.
- (b) The Permittee must prevent spills and overflows from the tank or containment systems using the methods described in the permit application. The Permittee must comply with the requirements of OAC Rule 3745-55-96 if a leak or spill occurs in the tank system.

D.6 Inspection Schedules and Procedures
OAC Rule 3745-55-95

- (a) The Permittee must inspect the tank systems, in accordance with the Inspection Schedule found in Section 6 of the permit application, and must complete the items in Permit Conditions D.6(b) and D.6(c) as part of those inspections.
- (b) The Permittee must inspect the overfill controls in accordance with the procedure and schedule in the permit application.
- (c) The Permittee must inspect the following components of the tank system once each operating day:
 - (i) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
 - (ii) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design, and;
 - (iii) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- (d) Tank Preventative Maintenance:
 - (i) For all permitted hazardous waste storage tanks, ultrasonic thickness testing must be conducted using the procedures in Section 4.3.1 of the permit application.
 - (ii) If a tank system or component is found to be leaking or unfit for use as a result of the ultrasonic testing, the Permittee must comply with Permit Condition D.7 and notify the Director, in accordance with Permit Condition D.8.
- (e) The Permittee must document compliance with Permit Condition D.6 in the operating record of the facility.

D.7 Response to Leaks or Spills
OAC Rule 3745-55-96

- (a) In the event of a leak or a spill from the tank system or from a secondary containment system, or if a system becomes unfit for continued use, the Permittee must remove the system from service immediately and complete the following actions:

- (i) Immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
- (ii) If the release was from the tank system, the owner/operator must, within twenty-four hours after detection of the leak, or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours or in as timely a manner as possible to prevent harm to human health and the environment.

- (iii) The Permittee must 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 and; (2) remove and properly dispose of any visible contamination of the soil or surface water.
- (b) Unless the requirements of Permit Conditions D.7(b)(i) through D.7(b)(iii) are satisfied, the Permittee must close the tank system in accordance with OAC Rule 3745-55-97 and the closure plan if there has been a leak or spill from the tank system or from a secondary containment system, or if a system becomes unfit for continual use.
- (i) For a release caused by a spill that has not damaged the integrity of the system, the Permittee must remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.
 - (ii) For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee must repair the primary system prior to returning it to service.
 - (iii) For a release to the environment caused by a leak from a component of the tank system that is below ground and does not have secondary containment, the Permittee must provide this component with secondary containment that meets the requirements of OAC Rule 3745-55-93 before the component can be returned to service.
- (c) For all major repairs (e.g., installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault) to eliminate leaks or restore the integrity of the tank system, the Permittee must obtain a certification by an independent, qualified, registered professional engineer in accordance with OAC Rule 3745-50-42(D)(1) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. This certification must be submitted to the Director within seven (7) days after returning the tank system to use.

D.8 Recordkeeping and Reporting
OAC Rules 3745-55-96, 3745-55-91(A), and 3745-55-92(G)

- (a) The Permittee must report to the Director, within 24 hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported. Releases that are contained within a secondary containment system need not be reported.

- (b) Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the Permittee must report the following information to the Director:
 - (i) Likely route of migration of the release;
 - (ii) Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
 - (iii) Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be impossible to meet this time period, the Permittee should provide the Director with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires;
 - (iv) Proximity of down gradient drinking water, surface water, and populated areas; and
 - (v) Description of response actions taken or planned.
- (c) Reserved
- (d) The Permittee must keep on file at the facility the written assessment of the tank system's integrity.
- (e) The Permittee must maintain at the facility a record of the results of leak tests and integrity tests conducted in accordance with Permit Conditions D.4(d)(i) through D.4(d)(ii).

D.9 Closure and Post-Closure Care
OAC Rule 3745-55-97

- (a) At closure of the tank system(s), the Permittee must follow the procedures in the closure plan in Section 9 of the permit application.
- (b) If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the closure plan, then the Permittee must close the tank system(s) and perform post-closure care following the procedures in the closure plan in Section 9 of the permit application. For the UST unit closed as a landfill, the Permittee must comply with the post-closure plan approved by Ohio EPA on September 30, 1992 and the terms and conditions of this permit.

D.10 Special Tank Provisions for Ignitable or Reactive Wastes
OAC Rule 3745-55-98

- (a) The Permittee must not place ignitable or reactive waste in the tank system or in the secondary containment system, unless the procedures specified in the permit application are followed. The Permittee must document compliance with this condition and place it in the operating record.
- (b) The Permittee must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon, as required in Tables 2-1 to 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1996 or most recent edition) incorporated by reference in OAC Rule 3745-50-11.

D.11 Reserved

D.12 Reserved

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MODULE E - CORRECTIVE ACTION REQUIREMENTS

E. RCRA CORRECTIVE ACTION SUMMARY

On November 27, 1985, a fire occurred in the Aboveground Storage Tank farm, which formerly existed east of well H-11S at the Wastewater Treatment Plant site, resulting in the destruction of the tank farm and a release of an unknown quantity of solvent to soil, surface water and ground water. Emergency response measures were implemented to contain the release, prevent off-site discharge and clean up solvent-affected media on site. The release caused ground water contamination as a result of: 1) infiltration of contaminants into the Underground Storage Tank (UST) backfill; 2) infiltration of contaminants in the storm sewer and storm sewer backfill, and; 3) permeation of native soil by contaminated surface runoff. After the fire, the United States Environmental Protection Agency (U.S. EPA) Region V negotiated an Administrative Order on Consent (AOC) with the Permittee (then Safety-Kleen Systems, Inc.)¹ to address the company's corrective action obligations for this release; the final order was issued by U.S. EPA on March 16, 1989. In 1987, interim corrective measures were implemented by the Permittee, including installation of three recovery wells (RW-1, RW-2, and RW-3) and an air stripping tower.

In May 1989, the Permittee submitted its first RFI Workplan; the June 1991 Final RFI Workplan was approved by U.S. EPA with conditions on July 24, 1991. In December of 1991, the Permittee initiated RFI activities to evaluate the nature and extent of releases of hazardous waste and hazardous constituents from the fire (i.e. to identify the types, quantities and locations of contaminants). Activities included sampling of soil gas, surface water, stream sediments and subsurface soils; soil borings and monitoring wells were installed (both on facility and adjacent properties) and geotechnical sampling occurred. A biological survey of the South Fork of the Licking River, and a literature review of subsurface hydrogeology and typical climatological conditions in the area was conducted.

In January 1993, the draft RCRA Facility Investigation Report (RFI) was submitted to U.S. EPA; the final report and RFI Addendum Volumes 1-6 were submitted in June 1993. U.S. EPA approved the RFI final report, with modifications, in June 1993. In August 1993, the Proposed Interim Corrective Measures and Workplan for Proposed Interim Corrective Measures was submitted; the workplan was approved by U.S. EPA on August 31, 1993. In September 1993, a soil vapor extraction system (SVE) pilot test was conducted to determine the feasibility of reducing VOC concentrations in unsaturated soils. This system was pilot tested from October 1993 to January 1994. In November 1993, the Permittee submitted the Interim Corrective Measures Work Plan for Interim Corrective Measure Ground Water Barrier and Recovery System to U.S. EPA; approval of this plan was received in January 1994. Installation of the ground water recovery system (including a sheet pile wall) commenced in March 1994 and was completed in May 1994, when operation of the system began. Two additional recovery wells (RW-4 and RW-5) were installed and the original recovery wells (RW-1 and RW-2) were taken off-line.

In August 1994, a draft proposed Corrective Measure Plan was submitted to U.S. EPA. Revisions to the plan were required over the next year, and the final Draft Corrective Measures Study was submitted in September 1995. On November 3, 1995, the revised Risk Based Cleanup Level Development Report was received by U.S. EPA. In December 1995, the air stripping tower was replaced with a low maintenance, low profile unit, and two existing recovery wells (RW-1 and RW-2) were re-activated.

A draft action approving the Corrective Measures Study was issued for public comment in January 1998. On June 5, 1998, U.S. EPA issued a RCRA Final Decision that included the Final Decision, Response to Comments,

¹ On March 21, 2008 ownership of the facility was transferred from Safety-Kleen Systems, Inc. to Clean Harbors Recycling Services of Ohio, LLC.

Statement of Basis and Index to the Administrative Record. The Permittee was notified at this time that all terms of the March 16, 1989 AOC had been satisfied and that the AOC was terminated. Transition of corrective action authority at the facility from U.S. EPA to Ohio EPA occurred with the issuance of the Part B Permit on June 30, 1998. Implementation of the selected remedies and remaining corrective action activities was required as a condition of this permit.

In January 1999, installation of a separate water and soil vapor extraction (WSVE) system was completed to further reduce VOC concentrations in site soil and ground water. In January 1999, recovery wells RW-6 and H-21S were activated to further remove and contain VOCs on site, and continues to operate the ground water recovery system. Site-wide ground water monitoring and reporting continue to occur semi-annually. In July 2001, Ohio EPA received from the Permittee as-built plans, construction completion reports, and operation and maintenance plans for the two treatment systems. Also included in this submittal were a Health and Safety Plan and a Public Involvement Plan.

Based on a review of recent semi-annual corrective action reports, Ohio EPA has determined that the Permittee's remedial measures are insufficient to prevent the migration of contaminants to deeper water bearing zones and off-site. After conducting a pump test and system evaluation in 2003, the Permittee submitted a Remediation Systems Evaluation Report in November of 2003. A Proposed Future Activities report was received by Ohio EPA on May 21, 2004. Ohio EPA's evaluation of these reports revealed that (1) contamination continues to migrate off site as evidenced by statistically significant increases in levels of hazardous constituents in wells near the downgradient property boundary, (2) the existing monitoring system is not adequate to evaluate the vertical and horizontal extent of contamination, and (3) the changes to the remedial and monitoring systems proposed by the Permittee are not adequate to address these issues, and investigation of an expanded remediation system or an alternate remedial method is necessary.

All corrective action documents referenced above are hereby incorporated into this permit and will be governed by applicable corrective action rules. Section 10 of the permit application details the findings of the site-wide RCRA facility investigation and the corrective action activities that have occurred or are ongoing.

In this permit and until such time as the Permittee requests a permit modification in accordance with Permit Condition A.27(a), Ohio EPA is requiring continued implementation of corrective measures consistent with the remedy selected by the U.S. EPA. The U.S. EPA-selected remedy and reporting schedule have been incorporated into the terms and conditions of this permit as condition E.9.

A schedule of compliance to address the noted deficiencies is included as Condition A.27 of this permit. The additional site investigation activities to be implemented are outlined in Section 10.4 of the modified Part B permit application and Condition E.9(a) of this permit.

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

As indicated in the Corrective Action Summary, the Permittee is currently addressing contamination from releases from the Aboveground Storage Tank farm due to the fire in 1985 and from the UST unit that was closed as a landfill in 1993 in a site-wide corrective action. The following conditions (E.5 - E.8) only apply in the event new WMUs are identified or releases from existing WMUs occur, in accordance with conditions E.10 and E.11.

E.4 Reserved

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

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 must submit a written RFI Workplan to Ohio EPA within 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 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 must implement the RFI Workplan according to the terms and schedule in the approved RFI Workplan.

(c) RFI Final Report

Within 60 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 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)

In the event 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 additional IM(s) (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)

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 must submit a written CMS Workplan to Ohio EPA within 90 days from the notification by Ohio EPA of the requirement to conduct a CMS.

- (i) Within 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 must implement the CMS Workplan according to the terms and schedule in the approved CMS Workplan.

(c) CMS Final Report

Within 60 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 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) Selected Remedy

Based on the selection criteria above, the Director has selected the following remedy for implementation in the matter of the contamination from releases indicated in the Corrective Action Summary. All final documents or reports, as approved or as modified and approved, become an enforceable condition of this permit.

Soil and ground water contamination has been identified as a result of the 1985 fire and destruction of the Aboveground Storage Tank farm, and was also found during the closure of four underground storage tanks. As identified in the Corrective Action Summary, the Permittee has implemented and must continue to operate the following remedies to address site-wide contamination:

- (i) The ground water recovery system, consisting of a low-profile air stripper, a sheet pile wall, and seven recovery wells (RW-1, RW-2, RW-4, RW-5, RW-6, RW-7, and H-21S), must be operated to contain contaminated ground water on-site and to treat the ground water prior to discharge to the Hebron POTW. Operation and maintenance of this system must be conducted as outlined in the Operation and Maintenance Plan submitted for the system in July 2001.
- (ii) The water and soil vapor extraction (WSVE) system installed in the west yard must be operated to remove VOCs from impacted soil in the area of the former underground storage tank (UST) farm. Operation and maintenance of this system must be conducted as outlined in the system Operation and Maintenance Plan submitted in July 2001.
- (iii) The Health and Safety and Public Involvement Plans submitted in July 2001 must be implemented as long as corrective measures are required.
- (iv) The following ground water monitoring and reporting is required semi-annually:
 - (a) The Permittee must monitor and evaluate the effectiveness of selected remedies and monitor potential migration of contaminated ground water from the facility in accordance

with OAC Rule 3745-54-100(G) and the Ground Water Monitoring Plan in Appendix 5-1 modified on August 6, 2001.

- (b) The Permittee must collect samples and conduct laboratory analysis of the samples from the following wells, provided sufficient sample volume is available, until the Part B permit is modified pursuant to Condition A.27(a)(iii): H-1S, H-1DD, H-4SR, H-7S, H-8M, H-8D, H-9S, H-10S, H-11S, H-12S, H-12D, H-15S, H-15M, H-15D, H-19S, H-20S, H-20M, H-20D, H-22M, H-23S, and H-24S. The constituents monitored for will, at a minimum, include VOCs and any SVOCs confirmed pursuant to Condition A.27 unless an alternate source demonstration is conducted and accepted by Ohio EPA for those SVOCs, as well as any potential daughter products of those constituents.
- (v) Until the risk assessment conducted pursuant to Condition A.27 is approved, the Permittee must treat the soil and ground water to meet the following cleanup levels:

Constituents of Concern	Target Cleanup Level - Soil (mg/kg)	Target Cleanup Level - Ground Water (ug/l)
1,2-DCE	66	80
Methylene Chloride	0.9	6.4
PCE	5.6	1.4
1,1,1-TCA	3260	1550
TCE	2.6	2.6
Mineral Spirits	2010	160

(b) Permit Modification

Ohio EPA will initiate a permit modification, as provided by OAC Rule 3745-50-51, to require implementation of any additional corrective measure(s) required for newly identified units or releases from existing units as necessary.

The Permittee shall not implement the corrective measure until the permit is modified pursuant to OAC Rule 3745-50-51.

(c) Financial Assurance

OAC Rule 3745-54-101

The Permittee must provide financial assurance in the amount specified in Section 9 of the permit application as necessary to implement the selected remedy described in condition E.9.(a) of this permit, including current and future operation and maintenance costs.

As part of any future modification of this permit to incorporate additional corrective measures, the Permittee must provide financial assurance in the amount determined by the Director as necessary to

implement the additional corrective measures as required by OAC Rule 3745-55-011(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 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 30 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.

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.

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MODULE F – POST-CLOSURE CARE

F. POST-CLOSURE CARE

The Underground Storage Tank (UST) area (former location of tank #s 18, 19, 20, and 21) was closed in accordance with the Permittee’s interim standards closure/post-closure plan approved by Ohio EPA on September 30, 1992. The Permittee had to close this unit as a landfill due to residual waste constituents found in the tank cavity (soil and ground water) that could not be removed at the time the closure occurred. A landfill cap was never required since the cap would interfere with ongoing site-wide corrective action activities that were designed to address both the UST area contamination and site-wide contamination that resulted from the 1985 fire at the facility.

The post-closure care period for the unit began on March 29, 1993, the date that the Permittee completed closure of the unit. The notices required to be filed pursuant to OAC 3745-55-16 and 3745-55-19 were completed prior to Ohio EPA's acceptance of the Permittee’s closure certification for the UST area. Post-closure care requirements for the UST area and any additional hazardous waste management units that must be closed with waste in place are covered by this module.

F.1 Unit Identification

The Permittee must provide post-closure care for the following hazardous waste management units, subject to the terms and conditions of this permit:

Type of Waste Unit	Unit No. or Other Designation	Maximum Waste Inventory	Description of Wastes Contained	Hazardous Waste No.	Year Post-closure began
Underground tank storage	UST #s 18, 19, 20, and 21	40,000 gallons	Distillation bottoms oil and sludge (tanks 18 and 19) and mineral spirits bottom sediment, water and process wastewater (tanks 20 and 21)	F002, D001, D006, D008, D018, D021, D027, D035, D039, and D040	1993

**F.2 Post-closure Procedures and Use of Property
 OAC Rule 3745-55-17**

(a) The Permittee must conduct post-closure care for each hazardous waste management unit listed in Permit Condition F.1 above, to begin after completion of closure of the unit and continue for 30 years after that date. The 30-year post-closure care period may be shortened upon application and demonstration approved by Ohio EPA that the reduced period is sufficient to protect human health and the environment. The 30-year post-closure care period may be extended if the Director finds that the extended period is necessary to protect human health and the environment.

- (b) The Permittee must maintain and monitor the ground water monitoring system and comply with all other applicable requirements of OAC Rules 3745-54-90 thru 3745-54-101 during the post-closure period.
- (c) The Permittee must implement the post-closure plan. All post-closure care activities must be conducted in accordance with the provisions of the post-closure plan.

F.3 Inspections

OAC Rule 3745-55-18(B)

The Permittee must inspect the components, structures, and equipment at the facility in accordance with the inspection schedule found in the post-closure plan.

F.4 Notices and Certification

OAC Rules 3745-55-19 and 3745-55-20

- (a) Not later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the Permittee must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the Permittee must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.
- (b) Within sixty (60) days after certification of closure of the first and the last hazardous waste disposal unit, the Permittee must:
 - (i) Record, in accordance with Ohio law, a notation on the deed to the facility property (or on some other instrument that is normally examined during the title search) that will in perpetuity notify any potential purchaser of the property that:
 - (1) The land has been used to manage hazardous wastes;
 - (2) Its use is restricted under OAC Rules 3745-55-10 thru 3745-55-20; and
 - (3) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility have been filed with the Director and Union Township, Licking County.
 - (ii) Submit a certification to the Director, signed by the Permittee, that the Permittee has recorded the notation specified in Permit Condition F.4(b)(i), including a copy of the document in which the notation has been placed.
- (c) If the Permittee wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, then the Permittee must request a modification to this permit in accordance with the applicable requirements in OAC Rules 3745-50-40 to 3745-50-66. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of OAC Rule 3745-55-17(C).

By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable hazardous waste requirements.

If the Permittee is granted a permit modification or otherwise granted approval to conduct such removal

activities, the Permittee may request that the Director approve either:

- (i) The removal of the notation on the deed to the facility property or other instrument normally examined during title search, or;
 - (ii) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.
- (d) Not later than sixty (60) days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee must submit to the Director, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent, qualified, registered professional engineer. Documentation supporting the independent, qualified, registered professional engineer's certification must be furnished to the Director upon request until the Director releases the Permittee from the financial assurance requirements for post-closure care under OAC Rule 3745-55-45.

F.5 Financial Assurance
OAC Rule 3745-55-45

- (a) The Permittee must maintain financial assurance during the post-closure period and comply with all applicable requirements of OAC Rules 3745-55-40 through 3745-55-51.
- (b) The Permittee must demonstrate to the Director that the value of the financial assurance mechanism exceeds the remaining cost of post-closure care, in order for the Director to approve a release of funds.
- (c) The Permittee must submit itemized bills to the Director when requesting reimbursement for post-closure care.

F.6 Post-closure Permit Modifications
OAC Rule 3745-55-18(D)

The Permittee must request a permit modification to authorize a change in the approved post-closure plan. This request must be in accordance with applicable requirements of OAC Rules 3745-50-40 through 3745-50-66, and must include a copy of the proposed amended post-closure plan for approval by the Director. The Permittee must request a permit modification whenever changes in operating plans or facility design affect the approved post-closure plan, there is a change in the expected year of final closure, or other events occur during the active life of the facility that affect the approved post-closure plan. The Permittee must submit a written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or not later than sixty (60) days after an unexpected event has occurred which has affected the post-closure plan.

MODULE J - GROUND WATER MONITORING

J. GROUND WATER MONITORING SUMMARY

The Permittee is currently maintaining two (2) ground water monitoring systems: 1) the site-wide system installed under the 1989 Administrative Order on Consent between the Permittee and U.S. EPA to monitor corrective action effectiveness, and 2) the system used to monitor the UST area during the post-closure care period. Site-wide corrective action was required to address releases to soil and ground water resulting from a November, 1985 fire at the facility. In addition, during closure of the UST area (former location of tank #s 18, 19, 20, and 21), in accordance with the closure/post-closure plan for the unit approved by Ohio EPA on September 30, 1992, residual contamination was found in the soil and ground water that necessitated closure of the unit as a landfill. The post-closure care period for the unit began on March 29, 1993, the date that the Permittee completed closure of the unit.

A schedule of compliance for the Permittee's submittal of a Class 3 permit modification to designate a more appropriate corrective action program is included in this permit as Permit Condition A.27. Pursuant to Permit Condition A.27, the Permittee is required, within sixty (60) days of Ohio EPA approval of the risk assessment report required by Permit Condition A.27 to submit a permit modification request to integrate the programs to monitor post-closure care of the UST unit (Module F) and site-wide RCRA corrective action (Module E).

J.1 Applicability

OAC Rules 3745-50-44(B), 3745-54-90, and 3745-54-91

- (a) The Permittee must comply with the applicable requirements in OAC Rules 3745-54-90 through 3745-54-100 for the purpose of detecting and characterizing releases to the uppermost aquifer, and evaluating the effectiveness of the corrective action program for the UST area (former location of tank #s 18, 19, 20, and 21). This unit is under post-closure care as a landfill and has been monitored under OAC Rule 3745-54-100 since issuance of a permit to the Permittee on June 30, 1998. This monitoring is based on and shall be as effective as the program for compliance monitoring under OAC Rules 3745-54-97 and 3745-54-99.
- (b) OAC Rules 3745-54-90 through 3745-54-100 apply during the active life, which includes the closure period, of the above-mentioned regulated units. After closure of each regulated unit, OAC Rules 3745-54-90 through 3745-54-100:
 - (i) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;
 - (ii) Apply during the post-closure care period under OAC Rule 3745-55-17 if the Permittee is conducting a detection monitoring program under OAC Rule 3745-54-98; or
 - (iii) Apply during the compliance period under OAC Rule 3745-54-96 if the Permittee is conducting a compliance monitoring program under OAC Rule 3745-54-99 or a corrective action program under OAC Rule 3745-54-100.
- (c) The Permittee is subject to OAC Rules 3745-54-90 through 3745-54-100 and must conduct a monitoring and response program as follows:

- (i) The ground water protection standard under OAC Rule 3745-54-92 has been exceeded. Several hazardous constituents under OAC Rule 3745-54-93 from a regulated unit have exceeded concentration limits under OAC Rule 3745-54-94 at the point of compliance (see Table 5-1 of the permit application) and in the ground water between the compliance point and the down-gradient facility property boundary. Therefore, the Permittee has implemented a corrective action program in accordance with Permit Condition J.11 and OAC Rule 3745-54-100 to bring the waste management unit back into compliance with the standards.

J.2 Ground Water Protection Standard

OAC Rules 3745-50-44(B), 3745-54-92 through 3745-54-96, and 3745-54-100(A)

The Permittee must ensure that the hazardous constituents under OAC Rule 3745-54-93 detected in the ground water from a regulated unit listed in this Permit Condition do not exceed the concentration limits under OAC Rule 3745-54-94 in the uppermost aquifer underlying the waste management area beyond the point of compliance under OAC Rule 3745-54-95 during the compliance period under OAC Rule 3745-54-96. The ground water protection standard has been established in this Permit due to hazardous constituents being detected in the ground water.

- (a) The Permittee must monitor the ground water to determine whether regulated units are in compliance with the ground water protection standard under OAC Rule 3745-54-92. The hazardous constituents detected in the ground water underlying a regulated unit and reasonably expected to be contained in or derived from the waste contained in the regulated unit to which the ground water protection standard applies and their concentration limits are listed below:

Hazardous Constituents	Concentration Limits (ug/l)
Chloromethane	10
Bromomethane	5
Vinyl Chloride	2
Chloroethane	10
Methylene chloride	5
Acetone	20
Carbon disulfide	20
1,1-Dichloroethene	7
cis-1,2-Dichloroethene	70
trans-1,2-Dichloroethene	100
1,1-Dichloroethane	5
1,2-Dichloroethane	5

Hazardous Constituents	Concentration Limits (ug/l)
Chloroform	5
1,1,1-Trichloroethane	200
Methyl ethyl ketone	20
Bromodichloromethane	5
Carbon tetrachloride	5
cis-1,3-Dichloropropene	5
1,2-Dichloropropane	5
Dibromochloromethane	5
Trichloroethene	5
Benzene	5
1,1,2-Trichloroethane	5
Bromoform	5
trans-1,3-Dichloropropene	5
2-Hexanone	20
4-Methyl-2-pentanone	20
1,1,2,2-Tetrachloroethane	5
Tetrachloroethene	5
Chlorobenzene	5
Toluene	1000
Styrene	100
Ethylbenzene	700
Xylene	10,000

In addition to the hazardous constituents listed above, the Permittee must monitor the following parameters:

- (i) Field Parameters: Temperature, specific conductance, and pH
- (ii) Additional Constituents (VOCs):

Hazardous Constituents	Detection Limits (ug/l)
Acetonitrile	100
Acrylonitrile	100
Allyl chloride	5
Benzyl chloride	25
Bromobenzene	5
Bromochloromethane	10
Bromodichloromethane	5
n-Butylbenzene	5
sec-Butylbenzene	5
tert-Butylbenzene	5
2-Chloroethyl vinyl ether	10
2-Chlorotoluene	5
4-Chlorotoluene	5
1,2-Dibromo-3-chloropropane	5
1,2-Dibromomethane	5
Dibromomethane	5
1,2-Dichlorobenzene	5
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	5
1,4-Dichloro-2-butene	25
Dichlorodifluoromethane	5
1,3-Dichloropropane	5
2,2-Dichloropropane	5
trans-1,3-Dichloropropane	5
Ethyl methacrylate	5

Hazardous Constituents	Detection Limits (ug/l)
Hexachlorobutadiene	5
Iodomethane	5
iso-Butanol	1000
Isopropylbenzene	5
4-Isopropyltoluene	5
Methacrylonitrile	25
Methyl methacrylate	5
Methyl-tert-butyl ether	5
Naphthalene	5
n-Propylbenzene	5
1,1,1,2-Tetrachloroethane	5
1,2,3-Trichlorobenzene	5
1,2,4-Trichlorobenzene	5
Trichlorofluoromethane	5
1,2,3-Trichloropropane	5
1,2,4-Trimethylbenzene	5
1,3,5-Trimethylbenzene	5
Vinyl acetate	25
m & p-Xylenes	5
o-Xylene	5

(b) Point of Compliance

OAC Rules 3745-54-91(A)(3), 3745-54-95, and 3745-54-100(A)(3) and (E)(1)

The point of compliance at which the ground water protection standard of OAC Rule 3745-54-92 applies is indicated on Figure 5-1. The Permittee must monitor well H-10S representing the quality of ground water passing the point of compliance. The Permittee must also monitor the ground water, as necessary, between the point of compliance and the downgradient property boundary in wells H-9S, H-15S, and H-15D to determine if the concentration limit has been exceeded at any point between the compliance point and the downgradient property boundary.

(c) Compliance Period

OAC Rules 3745-54-96 and 3745-54-100(F)

- (i) The compliance period, during which the ground water protection standard of OAC Rule 3745-54-92 applies, was equal to 13 years. The compliance period began on June 30, 1998, the date the Permittee was first required to comply with the ground water monitoring requirements in OAC Chapter 3745-54 through at least June 30, 2011.
- (ii) Since the Permittee is engaged in a corrective action program at the end of the compliance period specified above, the compliance period will be extended until the Permittee can demonstrate that the ground water protection standards of OAC Rule 3745-54-92 has not been exceeded for a period of three consecutive years.
- (iii) The Permittee may discontinue corrective action activities during the compliance period when the ground water protection standard has not been exceeded at any well listed in Permit Condition J.3(b) for any constituent listed in Permit Condition J.2(a) for six consecutive semi-annual sampling events. The Permittee must continue a compliance monitoring program under OAC Rule 3745-54-99 for the remainder of the compliance period.
- (iv) If the Permittee is performing compliance monitoring and the compliance period ends while a post-closure care period, required under OAC Rule 3745-55-17, is still in effect, the Permittee shall submit an application for a permit modification under OAC Rule 3745-50-51 to:
 - (1) Implement a detection monitoring program for the rest of the post-closure care period; or
 - (2) Extend the compliance period specified in Permit Condition J.2(c)(i) for an additional 13 years and continue compliance monitoring in accordance with OAC Rule 3745-54-99.

J.3 Well Location, Installation, Maintenance, and Removal

OAC Rules 3745-54-95, 3745-54-97(A) to (C), and 3745-54-100(D) and (E)

- (a) The Permittee's ground water monitoring system must consist of a sufficient number of wells, installed and screened at appropriate locations and depths, to yield ground water samples from the shallow and deep till zones which are considered to be the uppermost aquifer. The samples must:
 - (i) Represent the quality of background water that has not been affected by leakage from the regulated unit;
 - (ii) Represent the quality of ground water passing the point of compliance between the point of compliance and the downgradient property boundary, and beyond the property boundary, where necessary, to protect human health and the environment;
 - (iii) Allow for the detection and measurement of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer;
 - (iv) If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous

constituents from the regulated units that have entered the ground water in the uppermost aquifer;
 and

- (v) Demonstrate the effectiveness of the corrective action program. The well system must be as effective as the compliance ground water monitoring system required by OAC Rule 3745-54-99 in determining compliance with the ground water protection standard and in determining the success of the corrective action program under OAC Rule 3745-54-100.
- (b) The monitoring system consists of the ground water wells as specified on Figure 5.1 found in the Permit Application and in conformance with the following list:

Unit Name	Upgradient/ Background Wells	Downgradient/ Compliance Wells
Shallow Zone	H-1S	H-9S, H-10S, H-15S
Deep Zone	H-1D	H-15D

- (c) Wells identified in Permit Condition J.3(b) must be cased in a manner that maintains the integrity of the monitoring well bore hole and complies with the detailed plans and specifications presented in Section 5.6 of the permit application and presented in the 1993 RFI report. The casing must be screened and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space above the sampling depth must be sealed to prevent contamination of samples and the ground water.

Section 5.6 of the Permit Application contains ground water monitoring well construction diagrams which illustrate compliance with OAC Rules 3745-54-97(A) to (C).

- (d) The Permittee must remove or replace any monitoring well specified in Permit Condition J.3(b) in accordance with the Appendix to OAC Rule 3745-50-51 permit modification process. Each change must be accompanied by a revised map as specified on Figure 5-1 of the permit application.
- (e) Whenever any of the wells specified in Permit Condition J.3(b) are replaced, the Permittee must demonstrate to Ohio EPA that the ground water quality at the replacement well meets the criteria in Permit Condition J.3(a) within a one year period of the date of replacement using means appropriate to the reason for replacement.

J.4 Sampling and Analysis Procedures
 OAC Rules 3745-54-97 (D) and (E)

- (a) The Permittee must implement a ground water monitoring program in accordance with Sections 2 through 5 of Appendix 5-1 of the permit application. This program includes consistent sampling and analysis procedures designed to ensure monitoring results that provide a reliable indication of ground water quality below the waste management area and are in compliance with OAC Rule 3745-54-97(D).

- (b) The Permittee's ground water monitoring program includes sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples in compliance with OAC Rule 3745-54-97(E).
- (c) Field and analytical data must be validated in accordance with the procedures specified in Section 5 of Appendix 5-1 of the permit application.

J.5 Ground Water Surface Elevation
OAC Rule 3745-54-97(F)

The Permittee must determine the ground water surface elevation at each well specified in Permit Condition J.3(b) each time ground water is sampled using the methods in Sections 2.4.1 of Appendix 5-1 of the permit application.

J.6 Sampling Frequency
OAC Rule 3745-54-97(G)

Data on each hazardous constituent specified in Permit Condition J.2(a) will be collected from background wells and wells downgradient of the compliance point. The sampling procedure and interval for each constituent is described in Section 2.3 of Appendix 5-1 of the permit application.

- (a) The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles.
- (b) The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected.
- (c) Background values shall be established in the permit through the permit modification process set forth in OAC Rule 3745-50-51. The established background values and the computations necessary to determine background values must be included in the operating record and must be submitted to Ohio EPA in accordance with the schedule of compliance in Permit Condition A.27(a)(vii). Background data may be updated as necessary to provide an accurate representation of background ground water quality in accordance with the following.
 - (i) The sampling procedure must be one of the following:
 - (1) A minimum of eight independent samples, collected at evenly-spaced intervals over a one-year period, from each background well to determine background ground water quality for each parameter and/or constituent. Additional sampling for the establishment of background ground water quality beyond the one-year period will be allowed if adequately justified and approved by Ohio EPA; or
 - (2) If an intra-well statistical method is to be used, the Permittee must collect at least eight data points over at least a one-year period from each well (background and compliance wells); or
 - (3) If an inter-well statistical method is to be used, the Permittee must collect at least eight independent data points over at least a one-year period that are representative of background conditions.

- (ii) The Permittee shall, if necessary, establish background within one year of confirming the presence of a new hazardous waste constituent in the ground water.

J.7 Statistical Procedures

OAC Rules 3745-54-97(G),(H), and (I) and 3745-54-99 (D) and (G)

The Permittee must use the following statistical procedures in evaluating ground water monitoring results for each hazardous constituent specified in Permit Condition J.2(a) in each well specified in Permit Condition J.3(a) to identify statistically significant evidence of contamination, the exceedance of a concentration limit, and/or the effectiveness of corrective action:

- (a) The Permittee must choose and submit to Ohio EPA the appropriate statistical method within 30 days of the receipt of the last background sampling event data through the permit modification process set forth in OAC Rule 3745-50-51.
- (b) The Permittee must conduct statistical procedures as presented in Section 5.7 of the permit application.
- (c) The Permittee's statistical procedures must be protective of human health and the environment, provide reasonable confidence that the migration of hazardous constituents from a regulated unit into and through the aquifer will be indicated, and will determine whether such leakage of hazardous constituents into the ground water exceeds specified concentration limits. The statistical procedures must comply with the following performance standards:
 - (i) The statistical evaluation of ground water monitoring data must be conducted separately for each hazardous constituent specified in Permit Condition J.2(a) in each well.
 - (ii) The statistical method must be appropriate for the distribution of the data used to establish background or concentration limits. If the distribution for the constituents differs, more than one statistical method may be needed.
 - (iii) The statistical method must provide a reasonable balance between the probability of falsely identifying a non-contaminating and/or exceeding unit and the probability of failing to identify a contaminating and/or exceeding regulated unit.
 - (iv) If a control chart approach is used, the specific type of control chart and its associated parameter values must be proposed by the Permittee and approved in the permit if found to be protective of human health and the environment.
 - (v) If a tolerance or prediction interval procedure is used, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the Permittee and approved in the permit if these parameters are found to be protective of human health and the environment. These parameters must be determined after considering the number of samples in the background data base, the data distribution, and the range of concentration values for each constituent of concern.
 - (vi) The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (PQL) approved in the permit that is used in the statistical method must be the

lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility using the methods outlined in the most recent version of SW-846.

(vii) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

J.8 Operating Record and Reporting

OAC Rules 3745-54-73, 3745-54-75, 3745-54-77 and 3745-54-100(G)

(a) Operating Record

The Permittee must enter all of the following information obtained in accordance with Permit Module J. in the operating record:

- (i) Ground water monitoring data collected in accordance with this permit, including actual levels of constituents;
- (ii) The laboratory results from each of the wells and their associated qualifiers including the laboratory sheets for the full volatile and semi-volatile analyses (must include method codes, method detection limits, and units of measurement);
- (iii) The date each well was sampled (tabulated);
- (iv) The date, time, and identification of all blanks and duplicates;
- (v) Any field log documentation of deviation from the procedures in Appendix 5-1 of Section 5 of the permit application, including documentation of parameter omissions during the sampling event;
- (vi) The date the Permittee received the results from the laboratory;
- (vii) The date the Permittee completed its review of the analytical laboratory's verification of the accuracy and precision of the analytical data and determined its quality.
- (viii) The results of the data validation review per Permit Condition J.8(a)(vii) including: report completeness, chain of custody, sample receipt form, signed statement of validity, technical holding time review, data qualifiers, including their definitions, dilutions, blank data, spikes, spike recovery %, surrogate recovery, and an explanation of any rejected results consistent with accepted guidelines for data review;
- (ix) Results of all blanks and duplicates (trip, field, equipment, and method);
- (x) Results of the field parameters;
- (xi) The statistical evaluation of the data according to the statistical tests(s) that the Director has specified (must include all computations, results of statistical tests, and the date the statistical evaluation was completed.);
- (xii) Any change in well status (i.e., going from unaffected to affected status and vice versa);

- (xiii) Ground water surface elevations taken at the time of sampling each well as required by OAC Rule 3745-54-73(B)(6);
- (xiv) Data and results of the annual determination of the ground water flow rate and direction as required by OAC Rule 3745-54-73(B)(6);
- (xv) The results of the last three years of all inspections required by OAC Rule 3745-54-15(D) related to ground water monitoring and equipment as required by OAC Rule 3745-54-73(B)(5);
- (xvi) Evaluation of the efficiency of any corrective action performed to bring the ground water quality into compliance with the ground water protection standard.

(b) Semi-Annual, Annual, and Other Periodic Required Reporting
OAC Rules 3745-54-75, 3745-54-97(J) and 3745-54-100(G)

(i) Required Semi-Annual Reporting

The Permittee must report, in writing, semi-annually to the Director on the effectiveness of the corrective action program. These reports must be submitted on March 1 and September 1 of each year until the corrective action program has been completed. If either of those dates falls on a weekend, the reports will be due the following business day. Each report must reference the titles and dates of any other periodic reports required by the permit or any updates to those reports (for example, due to confirmation sampling), but generally does not need to include duplicates of hard copies previously submitted. The semi-annual reports must include, at a minimum, the analytical results required by Permit Conditions J.5 and J.6 and the results of the statistical analyses required by Permit Condition J.7.

(ii) Required Annual Reporting

The Permittee must submit an annual report to the Director by March 1st of the following year or first business day thereafter if this falls on a weekend. The March Semi-Annual report, as listed above, may be incorporated into the annual report. The annual reports must reference the titles and dates of any other periodic reports required by the permit or any updates to those reports, but do not need to include duplicates of hard copies previously submitted.

The annual reports must include, at a minimum, the analytical results required by Permit Condition J.11, the ground water elevation data required by Permit Conditions J.5 and J.8(a)(xii) and (xiii), and the results of the initial statistical analyses required by Permit Condition J.7. In addition, a copy on disk of all ground water and blank data must be submitted electronically in the format supplied by the Director, a hard copy of well-specific information (location [latitude and longitude], depth, construction, etc.) for any new/replacement wells, and any other information specified in the instructions for the annual report not addressed in this permit condition must be submitted as required by OAC Rules 3745-54-75 and 97(J).

(c) Other Reports
OAC Rule 3745-54-77(C)

The Permittee must comply with any reporting requirements that become necessary under Permit Condition J.11 in accordance with the schedules in the rules covered by that permit condition and as required by OAC Rule 3745-54-77(C). If any of these dates fall on a weekend, the reports will be due no later than the following business day.

J.9 Reserved

J.10 Reserved

J.11 Corrective Action
OAC Rules 3745-50-44(B)(8) and 3745-54-100

The Permittee is required to establish and implement a ground water corrective action program under OAC Rules 3745-54-90 to 3745-54-100 and must take corrective action to ensure that regulated units are in compliance with the ground water protection standard specified in Permit Condition J.2. To the extent practicable, the corrective action must be integrated with corrective action activities under Module E of this permit. The Permittee shall, at a minimum, discharge the following responsibilities:

- (a) The Permittee must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits specified in Permit Condition J.2(a) at the compliance point by removing the hazardous waste constituents or by treating them in place.

Soil and ground water contamination from this unit resulted from the storage of hazardous waste in the USTs, which included distillation bottoms oil and sludge, mineral spirits bottom sediments and water, and some process wastewater byproducts. A landfill cap was never required since the cap would interfere with ongoing site-wide corrective action activities; however, a portion of the west yard area was paved with asphalt during installation of the water and soil vapor extraction (WSVE) system. The WSVE system and ground water extraction system were designed to control or remediate both the UST area contamination and site-wide contamination that resulted from the 1985 fire.

- (b) The Permittee must continue corrective action required under this Permit Condition according to OAC Rule 3745-54-100(C) and the corrective measures outlined in the Permittee's September 1995 CMS and Module E of this permit. Corrective measures implemented to date include installation and monitoring of the site-wide ground water monitoring system, installation of a sheet-pile wall and ground water extraction system, installation and operation of a ground water treatment system, and installation and operation of a water and soil vapor extraction (WSVE) system. The Permittee must continue to operate these systems. These measures are required to contain the contamination on-site and reduce contaminant levels to risk-based clean levels.

- (c) In conjunction with the corrective action program, the Permittee must continue to implement a ground water monitoring program to fully characterize the contaminated ground water as required by OAC Rule 3745-50-44(B)(8)(a) and to demonstrate the effectiveness of the corrective action program at the wells described in Permit Condition J.3(b). Ground water monitoring must be as effective as the program for compliance monitoring required by OAC Rule 3745-54-99 in determining compliance with the ground water protection standard in Permit Condition J.2 and in determining the success of the corrective action program

in this condition. The ground water monitoring program must include:

- (i) Installation and maintenance of a ground water monitoring system at the compliance point as defined in Permit Condition J.2(b), and, as necessary to protect human health and the environment, between the compliance point and the downgradient property boundary and beyond the property boundary. The ground water monitoring system must comply with the requirements in Permit Condition J.3.
- (ii) Semi-annual collection, preservation, and analysis of samples pursuant to Permit Condition J.4 for each chemical parameter and hazardous constituent specified in Permit Condition J.2(a) from each well (background and compliance) specified in Permit Condition J.3(b) during the compliance period and any extensions due to corrective action implementation.
- (iii) Determination of the ground water surface elevation at all monitoring wells listed in Permit Condition J.3(b) each time ground water is sampled in accordance with OAC Rule 3745-54-97(F) and Permit Condition J.5.
- (iv) Determination of the ground water flow rate and direction in the uppermost aquifer at least annually as required by OAC Rule 3745-54-99(E) using the procedures specified in Section 5 of the permit application.
- (v) Collection and use of background data must be performed in accordance with Permit Condition J.6.
- (vi) The Permittee must determine whether there is a statistically significant exceedance of concentration limits for each of the hazardous constituents identified in Permit Condition J.2(a) within 60 days of each semi-annual sampling event. In determining whether such an exceedance has occurred, the Permittee must compare the ground water quality at each monitoring well specified in Permit Condition J.3(b) to the concentration limit for that constituent specified in Permit Condition J.2(a) in accordance with the statistical procedures specified in Permit Condition J.7.
- (vii) If there is an exceedance of any concentration limit for any new parameter listed in Permit Condition J.2(a), the Permittee must re-sample the monitoring well(s) in question to confirm the results. If the re-sample result is less than the associated concentration limit, the Permittee must continue routine monitoring.
 - (1) If the Permittee has determined that any of the concentration limits identified in Permit Condition J.2(a) are being exceeded in any well, the Permittee must notify the Director in writing, within seven (7) days of that determination. The notification must indicate which concentration limit(s) has been exceeded in which well(s).
 - (2) If new concentration limits are exceeded in any of the wells identified in Permit Condition J.3(b), the Permittee must evaluate, within ninety (90) days of the exceedance, whether the corrective action in this permit will continue to meet the requirements of OAC Rule 3745-54-100. If additional corrective action is necessary, the Permittee must comply with Permit Condition J.11(h).
- (viii) Beginning no later than three hundred sixty-five (365) days from the sampling event conducted in accordance with Condition A.27 of this permit, the Permittee must analyze samples from all

monitoring wells at the compliance point for all constituents contained in the Appendix to OAC Rule 3745-54-98 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer.

- (1) If the Permittee finds additional constituents present (i.e., not listed in Permit Condition J.2(a), the Permittee may, if desired, re-sample the affected well(s) within one month for the detected constituent(s) in the Appendix to OAC Rule 3745-54-98. If the results of the second analysis confirm the presence of new hazardous constituents, their concentrations must be reported to the Director in writing within seven (7) days from completion of the second analysis.
 - (2) If the Permittee chooses not to re-sample, then the Permittee must report the concentrations of the additional constituents to the Director within seven (7) days after completion of the initial analysis. Under either option, additional corrective action measures may be required and the Permittee must comply with Permit Condition J.11(a).
 - (3) Within 90 days of making the determinations in either Permit Condition J.11(c)(viii)(1) or (2), the Permittee must submit to the Director an application for a permit modification to incorporate the additional constituent(s) identified in Permit Condition J.11(c)(viii) into Permit Condition J.2(a). The application must include an identification of the concentration of each new constituent detected at the compliance point and/or at any well downgradient between the compliance point and the downgradient property boundary, and a proposed concentration limit for each under OAC Rule 3745-54-94(A)(1) or (A)(2), or a notice of intent to seek an alternate concentration limit for a hazardous constituent under OAC Rule 3745-54-94(B).
 - (4) The Permittee must begin sampling and analyzing for the new constituents at the next regularly scheduled sampling event following the event in which they were determined to be present.
- (d) In addition, the Permittee must conduct a corrective action program to remove or treat in place any hazardous constituents listed in Permit Condition J.2(a) that exceed their respective concentration limits listed in Permit Condition J.2(a):
- (i) Between the compliance point and the downgradient facility property boundary in accordance with the procedures specified in the permit application. To the extent practicable, this corrective action must be integrated with corrective action activities under Module E of this permit.
 - (ii) Beyond the facility boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the Agency that, despite the Permittee's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. 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 determined on a case-by-case basis.
 - (iii) Additional corrective action measures required under Permit Condition J.11(d) must be initiated and completed within a reasonable period of time considering the extent of contamination. In

accordance with OAC Rule 3745-50-44(B)(8), the Permittee must begin any additional corrective action within ninety (90) days from the time the ground water protection standard was exceeded.

- (iv) Corrective measures under Permit Condition J.11(d) may be terminated once the concentrations of hazardous constituents are reduced to levels below their respective concentration limits as listed in Permit Condition J.2(a).

(e) Other Source Demonstrations

OAC Rules 3745-54-98(G)(6) and 3745-54-99(I)

If the Permittee determines, pursuant to Permit Condition J.11(c) or (d), that either a new hazardous constituent has been confirmed in the ground water or a concentration limit specified in Permit Condition J.2(a) has been exceeded at any well, a demonstration may be submitted to the Director that a source other than a regulated unit caused the presence or exceedance or that the presence or exceedance resulted from error in sampling, analysis, or evaluation. In such cases, the Permittee must:

- (i) Notify the Director in writing within seven (7) days of determining a statistically significant presence or exceedance that such a demonstration will be made.
 - (ii) Within ninety (90) days of determining a statistically significant presence or exceedance, submit a report to the Director which demonstrates that a source other than a regulated unit caused the presence or exceedance, or that the presence or exceedance resulted from error in sampling, analysis, or evaluation.
 - (iii) Within ninety (90) days of determining a statistically significant presence or exceedance, submit to the Director an application for a permit modification to make any appropriate changes to the monitoring program at the facility.
 - (iv) The Permittee may make this demonstration in addition to, or in lieu of, submitting a permit modification application for changes to the corrective action ground water monitoring program. However, the same period of ninety (90) days is required for both a successful "Other Source Demonstration" and the submittal of the permit modification application. The Permittee is not relieved of the ninety (90) day requirement to submit a permit modification unless the "Other Source Demonstration" is deemed successful by Ohio EPA prior to the ninety (90) day time limit.
 - (v) Continue to monitor in accordance with the approved monitoring program at the facility.
- (f) Initiation and completion of a sampling program to comprehensively characterize the ground water quality required by Permit Condition J.11(d) will be performed as required by the schedule in Permit Condition A.27.
- (g) The Permittee must continue corrective action measures during the compliance period specified in Permit Condition J.2(c) to the extent necessary to ensure that the ground water protection standard is not exceeded. If the Permittee is conducting corrective action at the end of the compliance period, the Permittee must continue that corrective action for as long as necessary to achieve compliance with the ground water protection standard. The Permittee may terminate corrective action measures taken beyond the compliance period if the Permittee can demonstrate, based on data from the ground water monitoring program under Permit Conditions J.11(c) and (e), that the ground water protection standard in Permit Condition J.2 has not been exceeded for a period of three consecutive years. The ground water monitoring

requirements may be reduced in the event that the Permittee can successfully demonstrate that the level of contamination has been reduced to below the ground water protection standard and is protective of human health and the environment. The facility would then return to a Compliance Ground Water Monitoring Program under OAC Rule 3745-54-99. Any alternate clean standards would need to be determined through a risk assessment of the unit(s).

- (h) The Permittee must report in writing to the Director on the effectiveness of the corrective action program semi-annually according to Permit Condition J.8. Compliance with the recordkeeping and reporting requirements outlined in Permit Condition J.8 include maintaining a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under Permit Condition J.7 during the compliance period.
- (i) If the Permittee determines that the corrective action program established by this permit module no longer satisfies the requirements of OAC Rule 3745-54-100, the Permittee must, within ninety (90) days of that determination, submit an application for a permit modification in accordance with OAC Rule 3745-50-51 to make any appropriate changes to the program.

END OF PERMIT CONDITIONS