



eDocument Workflow Data Ingestion Form

DMWM - Hazardous Waste Permitting

Note: All HW Permitting Documents fall under "Permit-Intermediate" doc type.

Keyword Summary:

Secondary ID:	OHD 005 048 947	Stamped date on doc:	8/13/2014
Facility Name:	Systech Environmental Corporation		
County:	Paulding	CBI/Trade Secret Info (see protocol below)	
Program:	RCRA C – Hazardous Waste	Request contains CBI/TS claim?	No
Permit Type:	Permit to Install & Operate	Was a "public" copy included?	NA
Permit Subtype:	Application and Support	Financial Assurance Info (see protocol below)	
Permit Classification:	Terms and Conditions (Effective)	Request contains FA policy/account # info?	No
Permit Purpose:	Choose an item.	Contingency Plan Info (see protocol below)	
Confidentiality Status:	Public Record for Publication	Request contains facility staff pers/home phone #'s?	No

CBI/Trade Secret Protocol

Applications or requests that contain a claim of Confidential Business Information (CBI) or "trade secret" **are not be ingested** into the Agency's eDoc system. However, any claims must be made at the time of application submission, as required by both OAC rule 3745-49-03 and OAC rule 3745-50-30. Permittees must comply with the complete requirements of the above-cited rules, which include, among other things, submission of a corresponding "public" copy of the application or request which should be ingested into eDocs.

Financial Assurance Info Protocol

If the application contains "original signature" financial assurance documents, these documents **must be forwarded** to CO FA staff (Shawn Sellers or Melissa Cheung) as these types of documents must be secured in CO's fireproof file cabinet. Also, even if the FA information included in a mod application is not "original signature", if it includes information like insurance policy, bank account, letter of credit or bond numbers, these impacted pages should simply be physically removed and not scanned/included as a part of the ingested application. In place of the removed page, a page can be inserted which states: "Pages of this application which contain financial assurance mechanism details specific to policy or account numbers have been removed from this web-available version of the document."

Regarding review of FA components of mods, ERAS has set up a [tracking/request system](#) on SharePoint where DO staff can make a review request the HW FA Review Request list which can be accessed from the DMWM's Financial Assurance site.

Contingency Plan Info Protocol

If the application contains facility staff personal/home phone number information, the impacted pages should simply be physically removed and not scanned/included as a part of the ingested application. In place of the removed page, a page can be inserted which states: "Pages of this application which contain facility staff personal/home phone number information have been removed from this web-available version of the document."

Form Completed by: John Nyers

7/10/2015

Comments

OHIO E.P.A.

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OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO EPA - DMWM

AUG 13 2014

ENTERED DIRECTOR'S JOURNAL

**OHIO HAZARDOUS WASTE FACILITY
INSTALLATION AND OPERATION PERMIT RENEWAL**

Permittee: Systech Environmental Corporation

Mailing

Address: Systech Environmental Corporation
P. O. Box 266
Paulding, Ohio 45879-0266

Owner: Systech Environmental Corporation
3085 Woodman Drive; Suite 300
Dayton, Ohio 45420-1159

Operator: Systech Environmental Corporation
3085 Woodman Drive; Suite 300
Dayton, Ohio 45420-1159

Location: Systech Environmental Corporation
11397 County Road 176
Paulding, Ohio 45879

US EPA ID: OHD 005 048 947

Issue Date: **August 13, 2014**

Effective Date: **August 13, 2014**

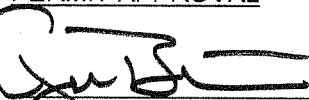
Expiration Date: **August 13, 2024**

AUTHORIZED ACTIVITIES

In reference to the application of Systech Environmental Corporation 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 in containers and tanks
- Treatment in containers and tanks
- Corrective Action

PERMIT APPROVAL



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.

Entered into the Journal of the Director this 13th day of August, 2014.

By Dorothy Kassiker

of the Ohio Environmental Protection Agency.

**I certify this to be a true and accurate copy of the
official documents as filed in the records of the Ohio
Environmental Protection Agency.**

By: Dorothy Kassiker Date: 8-13-14

MODULE A - GENERAL PERMIT CONDITIONS

A. GENERAL PERMIT CONDITIONS

A.1 Effect of Permit

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

- (a) The Permittee is authorized to store and treat 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 February 3, 2013 and last updated on April 21, 2014 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

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Journal. The permit expiration date is ten years after the date of journalization of this permit.

A.4 Severability

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

A.5 Duty to Comply
OAC Rule 3745-50-58(A)

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

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

- (a) If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a completed permit application for a hazardous waste facility installation and operation permit renewal and any necessary accompanying general plans, detailed plans, specifications, and such information as the Director may require, to the Director no later than one hundred eighty (180) days prior to the expiration date of this permit, unless a later submittal date has been authorized by the Director upon a showing of good cause.
- (b) The Permittee may continue to operate in accordance with the terms and conditions of the expired permit until a renewal permit is issued or denied if:
 - (i) the Permittee has submitted a timely and complete permit application for a renewal permit under OAC Rule 3745-50-40; and
 - (ii) through no fault of the Permittee, a new permit has not been issued

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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 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.

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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, 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

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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) Corrective Action records must be maintained at least three (3) years after all Corrective Action activities have been completed.

A.15 Planned Changes

OAC Rules 3745-50-51 and 3745-50-58(L)(1)

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

A.16 Waste Shipments

OAC Rules 3745-52-12 and 3745-53-11, ORC Section 3734.15(C)

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

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

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

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

- (a) The permit may be transferred to a new owner or operator only if such transfer is conducted in accordance with ORC Chapter 3734 and the rules adopted thereunder. This permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified under OAC Rule 3745-50-51. Before transferring ownership or operation of the facility, the Permittee must notify the new owner or operator in writing of the requirements of ORC Chapter 3734 and the rules adopted thereunder (including all applicable Corrective Action requirements).
- (b) The Permittee's failure to notify the new owner or operator of the requirements of the applicable Ohio law or hazardous waste rules does not relieve the new owner or operator of its obligation to comply with all applicable requirements.

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

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

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

- (a) The Permittee must report orally to Ohio EPA's Division of Environmental Response and 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:

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- (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 Northwest 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 Certification of Construction or Modification

OAC Rule 3745-50-58(L)(2)

Except as provided in OAC Rule 3745-50-51, the Permittee may not commence treatment, or storage of hazardous waste in the modified portion of the facility until the Permittee has submitted to the Director, by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed, or modified in compliance with the permit; and

- (a) the Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
- (b) the Director has either waived the inspection or has not, within fifteen (15) days of the date of the submittal of the letter, notified the Permittee of his intent to inspect.

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.

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A.25 Confidential Information

OAC Rules 3745-49-03 and 3745-50-30

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

A.26 Ohio Annual Permit, Disposal, and Treatment Fees

OAC Rules 3745-50-33 through 3745-50-36

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

A.27 Compliance Schedule - Documents

OAC Rules 3745-50-50 and 3745-50-51

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

Ohio EPA, Director
c/o DMWM, Engineering, Remediation, and Authorizations Section
P.O. Box 1049
Columbus, Ohio 43216-1049

Ohio Environmental Protection Agency
Northwest District Office
Division of Materials and Waste Management
347 North Dunbridge Road
Bowling Green, Ohio 43402

- (b) The Permittee must not manage hazardous waste in the to-be-constructed portions of the facility until compliance is achieved with the Ohio hazardous waste rules and the terms and conditions of this permit, and with the following:

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- (i) At least thirty (30) days prior to commencing construction of the container storage building at the facility, the Permittee must submit to Ohio EPA all relevant detailed final design and construction plans as approved by the Building Official in accordance with OAC Rule 4101:2-1-23 (including ancillary equipment, blue prints, material of the construction, etc.) covering each aspect of the proposed construction. The final design and construction plans mean final design and specifications necessary for the commencement of the construction.
- (ii) At least thirty (30) days prior to commencing construction of the container storage building at the facility, the Permittee must submit to Ohio EPA a schedule of construction including the estimated starting and completion dates.
- (iii) If the final plans of the container storage building, as submitted, are inconsistent with the conceptual and/or preliminary plans contained in the permit application and with the terms and conditions of this permit, such submittal may be considered by Ohio EPA as information constituting a change to the permitted facility and thus require submission of a permit modification.
- (iv) Upon completion of construction of the container storage building, the Permittee must submit to Ohio EPA, by certified mail or hand delivery, a "certificate of use and occupancy" issued by the Building Official in accordance with OAC Rule 4101:2-1-27 [for Tanks OL-10 and OL-11, the Permittee must provide Tank Installation Certification in accordance with OAC Rule 3745-55-92(B)] and a certification stating that the facility has been constructed in compliance with applicable rules, the terms and conditions of this permit, applicable state building codes (including codes for fire, electrical service, and plumbing), and the permit application.
- (v) Within sixty (60) days after completion of construction of the container storage building, "as built" drawings must be submitted to Ohio EPA. If the submitted "as built" drawings appear inconsistent with the construction design plans submitted under permit Condition A.27(b)(i), such submittal may be considered by Ohio EPA as information constituting a change to the permitted facility and thus require submission of a permit modification.

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- (vi) No hazardous waste shall be managed at the newly constructed portion(s) of the facility until Ohio EPA, in accordance with OAC Rule 3745-50-58(L), has inspected such portion(s) of the facility and finds that it is in compliance with all applicable rules, the terms and conditions of this permit and the permit application.
- (vii) The Permittee shall not manage hazardous waste in the modified portions of the facility until the Permittee has obtained all the necessary permits.

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

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

- (i) Updated Closure Cost Estimate
OAC Rule 3745-55-42

Section 8.7 Table 8.5 of the permit application containing the cost estimate for closure must be updated to include a copy of the current closure cost estimate as set forth in OAC Rule 3745-55-42.

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

Section 8.12 Appendix 4 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 3745-55-43, and as specified by 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 cost estimate.

During the life of the permit the facility may change the financial assurance mechanism as stated in OAC Rule 3745-55-43. The facility must submit the financial assurance mechanism documentation to the Director of Ohio EPA in accordance with the parameters set forth in OAC Rule 3745-55-43.

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

Section 8.12 Appendix 4 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.

This information must be submitted in accordance with OAC Rule 3745-55-51.

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

- (a) Unless otherwise specified by the hazardous waste rules, the Permittee must maintain at the facility, until closure is completed and certified by 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

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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) annually-adjusted cost estimate for facility closure, as required by OAC Rule 3745-55-42 and the terms and conditions of this permit.
 - (ix) all other documents required by Module A, Permit Condition A.12.
- (b) The Permittee must maintain copies of all inspection logs at the facility for a period not less than three (3) years from the date of inspection.

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

- (a) The Permittee must submit a Waste Minimization Report describing the waste minimization program required by OAC Rules 3745-54-75(H), (I), and (J); 3745-54-73(B)(9); and 3745-52-20(A) at least once every five years. The provisions of OAC Rules 3745-54-75(H), (I) and (J); and 3745-54-73(B)(9) must be satisfied biennially.
- (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 138,150 metric 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.
- (c) All hazardous waste accepted at the facility shall be processed for the purpose of energy recovery.

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), he must inform the generator in writing that he 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), he 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.
- (d) Poly-Chlorinated Biphenyls (PCBs)
 - (i) All incoming hazardous waste shipments shall be sampled and analyzed for PCBs. If PCBs are detected in waste received at concentrations below the TSCA regulated limit of 50 ppm, the Permittee may accept the shipment provided that the generator provides certification or other documentation to the Permittee that the waste was not blended to reduce the PCB concentration below the TSCA regulated limit of 50 ppm. If PCBs are detected in the waste received with concentrations at or above 50 ppm, the shipment shall be rejected.
 - (ii) The Permittee must maintain in the facility operating record, generator certification or other documentation for wastes accepted by the

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Permittee with a PCB concentration below the TSCA regulated limit of 50 ppm.

(e) Radioactivity

- (i) All incoming hazardous waste shipments must be sampled and screened for radioactivity following method "ASTM – D5928-96 Standard Test Method for Screening of Waste for Radioactivity." The Permittee must establish the criteria to be used for identifying "negative" and "positive" test results within (90) days after the effective date of this permit. The "negative" and "positive" test results and supporting documentation must be maintained in the facility operating record. If a positive test for radioactivity is detected in waste received, the Permittee must reject the shipment.
- (ii) The Permittee must follow the calibration and standardization procedures established in method "ASTM – D5928-96 Standard Test Method for Screening of Waste for Radioactivity." Background radioactivity must be determined at the beginning of each working day.

(f) Acceptance criteria for metals

- (i) The Permittee must randomly sample and analyze at least ten (10) percent of the incoming hazardous waste shipments. The analysis must be for Lead, Mercury, Arsenic, Cadmium, Chromium and Beryllium and must be conducted in accordance with "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, July 1998," and additional supplements or editions thereof, hereby incorporated by reference in this permit.

Any shipment of hazardous waste in which the metals concentration varies from the data supplied on the Waste Profile Sheet by more than the limits specified below shall be classified as a discrepancy. This discrepancy will require that the Permittee contact the generator and obtain additional information which will explain the reason for the discrepancy. If the discrepancy is due to a sampling or analytical error, no further action would be taken. If the discrepancy is due to a process change at the generator, the generator would be required to submit a revised Waste Profile Sheet. This discrepancy will be recorded in the Operating Record on a Waste Discrepancy report if

the waste shipment is accepted. The shipment may be accepted at the facility as long as the limits, as set forth in the cement kiln operating permits (e.g. Permit to Operate) can be achieved by blending the waste with other hazardous waste fuel.

The limits on variations between incoming shipment analysis and Waste Profile Sheet information that defines a discrepancy are:

<u>Concentration</u>	<u>Variation</u>
0 – 20 ppm	+/- 10 ppm
21 – 50 ppm	+/- 20 ppm
51 – 100 ppm	+/- 30 ppm
101 – 250 ppm	+/- 75 ppm
251 – 500 ppm	+/- 150 ppm
501 – 1,000 ppm	+/- 300 ppm
1,001 – 10,000 ppm	+/- 500 ppm
>10,000 ppm	+/- 1,000 ppm

(ii) Blended Fuel Metal Analysis

The Permittee must sample and analyze each batch of blended hazardous waste fuel for the metals listed in Condition (B)(3)(f)(i) of this permit. The analysis must be conducted in accordance with "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, July 1998," and additional supplements or editions thereof, hereby incorporated by reference in this permit. The results of this analysis must be obtained prior to the blended hazardous waste being used as a supplemental fuel for the cement kilns at the OHD987048733 facility (f.k.a. Lafarge).

(g) Acceptance criteria for Volatile Organic Compounds (VOC)

The Permittee must perform analysis of incoming hazardous waste fuel shipments for VOCs as specified in the waste analysis plan. In the event that a previously undetected component is found and constitutes more than ten (10) percent of the mixture, the following shall apply:

- (i) If the Permittee demonstrates that the component in question is normally present in mixtures of hydrocarbons (e.g. mineral spirits, diesel fuel, fuel oil, etc.) and these mixtures of hydrocarbons are listed

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on the Waste Profile Sheet, then there is no discrepancy and no further action is needed.

(ii) If the component can be identified as a constituent which has not been listed on the Waste Profile Sheet, this shall constitute a discrepancy.

(a) If the constituent is not listed on the Waste Profile Sheet but is allowable under the permit, and all other tests indicate that the hazardous waste fuel is suitable as substitute fuel, the Permittee must contact the generator in an attempt to reconcile the discrepancy. If the discrepancy is due to a sampling or analytical error, this information must be recorded on the Waste Discrepancy report and will become part of the facility operating record. If the discrepancy is due to a process change the generator must submit a revised Waste Profile Sheet prior to sending the next shipment of that waste stream.

(b) If the constituent is not listed on the Waste Profile Sheet and not allowed under the permit, the shipment shall be rejected.

(h) Acceptance criteria for Corrosive Wastes

The Permittee must perform analysis on all incoming wastes. The Permittee must reject any waste that exhibits the characteristic for corrosivity. Waste is hazardous for corrosivity if it exhibits a pH of less than or equal to two or greater than or equal to 12.5 using method 9040 in SW-846.

B.4 Security
OAC Rule 3745-54-14

The Permittee must comply with the security provisions of OAC Rule 3745-54-14(B)(1) or (2) and (C) and Section 5 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 5 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

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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 7 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 4 and 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) All wiring and electrical equipment at the designated facility must meet the National Fire Protection Association's standards for hazardous locations (See National Fire Protection Association, "National Electric Code" National Fire Codes, 1985 Edition, Vol. 3, Chapter 5, Special Occupancies, Articles 500-503, pp.176 through 189).

B.8 Reserved

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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 6 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 5 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 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 6 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 6 of the permit application.

B.16 Contingency Plan - Released Material and Emergency Response Material and By-products

OAC Rule 3745-54-56(G)

- (a) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
- (b) All liquid or solid material resulting from fire, explosion, released material or emergency response material and by-products that the Permittee is required to evaluate to determine whether such material is hazardous waste in accordance with OAC Rule 3745-52-11, must be collected and managed as a hazardous waste unless the Permittee can demonstrate that such waste is not hazardous in accordance with OAC Rule 3745-51-03(C) and (D).

B.17 Amendments to Plan

OAC Rule 3745-54-54

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

B.18 Copies of Plan

OAC Rule 3745-54-53

- (a) The Permittee must comply with the requirements set forth in OAC Rule 3745-54-53 regarding contingency plan distribution. The Permittee must maintain at the facility a copy of the contingency plan and all revisions to the plan.
- (b) The Permittee must, in accordance with OAC Rule 3745-54-53, submit a copy of the contingency plan to all local police departments, fire departments, hospitals and local emergency response teams that may be

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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 Environmental Protection Agency'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 6 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 within 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.

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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 8 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 8 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 Rule 3745-55-12 (C).

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

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

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

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

B.31 Time Allowed For Closure

OAC Rule 3745-55-13

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

B.32 Disposal or Decontamination of Equipment, Structures, and Soils

OAC Rule 3745-55-14

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

B.35 Reserved

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B.36 Cost Estimate for Facility Closure

OAC Rule 3745-55-42

- (a) The Permittee's most recent closure cost estimate, prepared in accordance with OAC Rule 3745-55-42 is specified in Section 8 of the permit application.
- (b) The Permittee must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with OAC Rule 3745-55-43.

The Permittee must adjust the closure cost estimate for inflation within 30 days after the close of the Permittee's fiscal year and before submission of updated information to the Director, as specified in OAC Rule 3745-55-42(B).

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

B.37 Financial Assurance for Facility Closure

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

B.38 Liability Requirements

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.

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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.

MODULE C - CONTAINERS STORAGE & TREATMENT

C. CONTAINER STORAGE AND MANAGEMENT

Systech Environmental Corporation's permitted container storage, treatment and management areas are located in three areas; the container processing building, the direct-burn unloading pad, and the drop and hook storage pad. Containers managed at the facility include 55 gallon steel drums, 500 gallon portable steel containers referred to as "Systanks," bulk rail tankers and bulk truck tankers. Shipments of hazardous waste arrive on-site via rail and truck. All shipments are weighed, sampled, and stored or off-loaded in designated areas. Bulk rail and truck shipments are also discussed in Module D of this permit. Container treatment processes employed at the facility include dissolving or re-suspending semi-solid and viscous materials using solvents or industrial dispersers and mechanical mixing and agitating devices. Wastes received and managed in the container processing building are pumped via dedicated piping to one of the blend tanks discussed further in Module D of this permit. Wastes received and managed at the direct-burn unloading pad are pumped via dedicated piping directly to the adjacent cement kilns located at the OHD987048733 facility (f.k.a. Lafarge). Wastes that cannot be pumped, such as rags and bolts, are removed from the process via filters, grinders and knock out boxes and are managed as hazardous waste to be disposed of at off-site facilities. Wastes treated, stored and managed at the facility are primarily organic liquids and sludge from painting, coating, and ink industries. The hazardous waste codes associated with these wastes are listed in permit Condition C2. below.

The container processing building, which is designed to be approximately 155 feet by 165 feet in size, is to be divided into three bays with a maximum storage capacity of 228,000 gallons of hazardous waste when completed. The storage areas are designated the west, middle, and east bays. The west bay has dimensions of approximately 90 feet by 40 feet and a storage capacity of 63,000 gallons. The middle bay has dimensions of approximately 90 feet by 75 feet and a storage capacity of 120,000 gallons. The east bay has dimensions of approximately 50 feet by 50 feet and a storage capacity of 45,000 gallons. The maximum storage capacity of each bay is based on one 500 gallon portable container per 4 foot by 4 foot area minus 4 foot aisles between every two containers and 8 foot aisles for major passageways. The secondary containment for each of the storage bays consists of a concrete floor and curbing sloped to a sump to contain spills.

The secondary containment capacity of each bay, 13,464 gallons for the west bay, 25,245 gallons for the middle bay, and 9,350 gallons for the east bay, exceeds 20% of the total waste storage capacity for each bay. The permitted container

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processing building also includes a rail car and truck unloading dock and an approximately 90 foot by 65 foot container processing area.

The current container processing building is similar in size and location to the west bay as described above. The building is divided into a container processing room and a container storage room. The container storage room is used for on-site generated waste storage and accepted off-site container storage.

Hazardous wastes that do not require blending, have strong odors or that are incompatible with hazardous wastes currently stored in the on-site hazardous waste storage tanks discussed in Module D of this permit may be processed at the direct-burn unloading pad. The direct-burn unloading pad is designed to be approximately 50 feet by 39.5 feet in size with a maximum storage capacity of 6,000 gallons of hazardous waste. The maximum storage capacity is based on one 6,000 gallon truck tanker. The secondary containment consists of a concrete floor and curbing sloped to a sump to contain spills. The secondary containment capacity is approximately 6,413 gallons after correction for a 25-year, 24 hour rain event, which is 107% of the total waste storage capacity for the pad.

Hazardous waste which arrives on-site via truck which cannot be immediately processed will be stored at the drop and hook storage pad, which is designed to be approximately 59 feet by 96 feet in size, to be divided into two pads with a maximum storage capacity of 48,000 gallons of hazardous waste when completed. The storage areas are designated the north and south lots. The two contiguous pads are approximately 59 feet by 48 feet in size with a maximum storage capacity of 24,000 gallons of hazardous waste in each area. The maximum storage capacity is based on four 6,000 gallon truck tankers. The secondary containment consists of a concrete floor and curbing sloped to a sump to contain spills. The secondary containment capacity is approximately 6,044 gallons in each area after correction for a 25-year, 24 hour rain event, which is greater than 25% of the total waste storage capacity of the pad and 100% of the largest container to be stored on the pad.

All concrete secondary containment surfaces in the container processing building, the direct-burn unloading pad and the drop and hook storage pad will be coated with an impervious coating which is compatible with the wastes stored in the area. The concrete will be maintained to be free of cracks and other deterioration.

C.1 Container Storage/ Quantity Limitation

(a) The Permittee is authorized to store 63,000 gallons of containerized waste in

the West Bay of the container processing building, 120,000 gallons of containerized waste in the Middle Bay of the container processing building, 45,000 gallons of containerized waste in the East Bay, of the container processing building, 6,000 gallons of containerized waste on the direct-burn unloading pad, 24,000 gallons of containerized waste on the North Lot of the drop and hook storage pad, and 24,000 gallons of containerized waste in the South Lot of the Drop and Hook storage pad. The Permittee must not store more than a total of 228,000 gallons of containerized waste at any given time in the permitted container areas. The Permittee must store hazardous waste in the types of containers (size and type) described in Section 4 of the permit application.

- (b) For the purpose of compliance with the capacity limitation of this permit, each container will be considered to be storing an amount of hazardous waste equal to its capacity, regardless of the actual quantity stored in the container.
- (c) Permit Conditions C.1(a) and C.2 shall not apply to the Permittee's activities as a generator accumulating hazardous waste on-site in compliance with OAC Rule 3745-52-34 and 40 CFR Part 265, subparts AA, BB, and CC.

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

C.2 Limitations on Treatment of Hazardous Waste in Containers

- (a) The Permittee is authorized to treat hazardous waste in the permitted treatment area, located in the container storage building. The Permittee must not treat more than 1,000 gallons per hour of waste in containers. The Permittee must treat hazardous waste in containers in the manner described in Section 4 of the permit application.
- (b) Permit Condition C.2(a) shall not apply to the Permittee's activities as a generator treating hazardous waste in containers on-site in compliance with OAC Rule 3745-52-34.

However, when treating waste within the permitted treatment area, in accordance with OAC Rule 3745-52-34, the Permittee must not, for the total amount of hazardous waste treated, exceed the maximum throughput

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capacity established under this condition.

C.3 Waste Identification

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

D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043.

F001, F002, F003, F004, F005, F006, F007, F008, F009, F010, F011, F012, F019, F024, F025, F034, F035, F037, F038, F039.

K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K062, K069, K071, K073, K083, K084, K085, K086, K087, K088, K093, K094, K095, K096, K097, K098, K099, K100, K101, K102, K103, K104, K105, K106, K107, K108, K109, K110, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K131, K132, K136, K141, K142, K143, K144, K145, K147, K148, K149, K150, K151, K156, K157, K158, K159, K161, K169, K170, K171, K172, K174, K175, K176, K177, K178, K181.

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136, U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U151, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176,

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U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188,
U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203,
U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216,
U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234,
U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249,
U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387,
U389, U394, U395, U404, U409, U410, U411.

P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012,
P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, P026,
P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040,
P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054,
P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068,
P069, P070, P071, P072, P073, P074, P075, P076, P077, P078, P081, P082,
P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098,
P099, P101, P102, P103, P104, P105, P106, P108, P109, P110, P111, P112,
P113, P114, P115, P116, P118, P119, P120, P121, P122, P123, P127, P128,
P185, P188, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201,
P202, P203, P204, P205.

- (a) The Permittee must not accept any waste into container storage that has 2,4 dinitrotoluene detected during the organic scan.
- (b) The Permittee must not accept any waste constituent into container storage that has a physical characteristic of being a gas at ambient temperature and pressure. This provision shall not preclude particular waste codes due to "derived from" rules.
- (c) During any calendar year, the Permittee must not manage through container storage hazardous waste in excess of the maximum annual quantity set forth in permit Condition B.1(b).

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.

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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.
- (d) The Permittee must not have more than five (5) rail cars containing hazardous waste on-site at any one time.

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

- (a) The Permittee must construct and 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. The Permittee shall ensure that the coating(s) utilized in lining the secondary containment system(s) is compatible with each waste stored in containers situated at the permitted Container Storage (Pad) Area(s). For those

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hazardous wastes that are deemed incompatible with the liner material, the Permittee must install a separate secondary containment structure, located within the existing structure, possessing the appropriate liner, in order to withstand any degrading effects imposed through initial and/or prolonged contact (e.g., 24 hours) with released waste materials.

- (c) The base of the containment system must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.
- (d) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in Permit Condition C.7(b) above.
- (e) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner. This time period is not to exceed twenty-four (24) hours from the time spilled and/or leaked waste is discovered to have reached the hazardous waste pad sump.

C.8 Reserved

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

The Permittee must inspect the container storage area in accordance with the inspection schedule contained in Section 5 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 5 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 4 of 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 8 of the permit application.

MODULE D - TANK STORAGE, TREATMENT AND MANAGEMENT

D. MODULE HIGHLIGHTS

Systech Environmental Corporation's tank storage, treatment and management system consists of eleven permitted tanks designated OL-1 through OL-11. Tanks OL-1, OL-2, OL-3, and OL-4 are above-ground steel tanks of dimensions approximately 12 feet in diameter and 30 feet in height with a storage capacity of 25,000 gallons each. Tanks OL-5 and OL-6 are above ground steel tanks of dimensions approximately 12 feet in diameter and 35 feet in height with a storage capacity of 30,000 gallons each. Tanks OL-7, OL-8, OL-9, OL-10, and OL-11 are above ground steel tanks of dimensions approximately 30 feet in diameter by 30 feet in height with a storage capacity of 150,000 gallons each. Tanks OL-10 and OL-11 are permitted but not constructed. The total permitted tank storage capacity at the facility is 910,000 gallons.

All tanks are equipped with high level alarms which are audible at the offloading locations and the laboratory. The high level alarms are set to trigger automatic pump feed cut-off devices to prevent overfilling the tanks. In addition, the amount of hazardous waste added to and removed from each tank is recorded in the facility operating log on a daily basis.

Each of the tanks is surrounded by a concrete secondary containment structure which is capable of capturing greater than 100% of the largest tank volume plus accumulated rain from a 25 year, 24 hour storm event. Hazardous wastes stored and managed in the tanks are primarily organic liquids and sludges composed primarily of waste solvents from paint, coating, and ink industries. These wastes are often ignitable and contain metals and organic compounds. Tanks OL-1 through OL-6 are the primary receiving and blending tanks at the facility. Tanks OL-7 through OL-11 are primarily used for further blending of the wastes received to ensure a consistent fuel to the adjacent cement kilns at the OHD987048733 facility (f.k.a. Lafarge). Tanks OL-7 through OL-11 are commonly referred to as the facility's burn tanks. All ancillary equipment is located above ground or in below grade trenches equipped with sumps and manual pumps to prevent routine contact with soil or water.

Bulk shipments received at the facility by rail or truck are weighed, sampled and off-loaded at dedicated areas which are lined in concrete. Bulk shipments are off-loaded adjacent to the blend tanks. To facilitate better emptying of the bulk shipments, a pump may be lowered into the rail tanker or truck tanker to circulate the waste within the tanker and re-suspend solids which may have settled out during transportation. The off-loaded waste is transferred to one of the blend tanks (Tanks OL-1 through OL-6) via dedicated piping. The piping contains grinders to reduce the size of solids in the waste and knock out boxes to remove non-pumpable

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materials from the waste. Wastes which are removed from the process via these grinders and knock out boxes are managed as hazardous waste to be shipped off-site for disposal.

D.1 Tank Storage Quantity Limitation/Waste Identification

- (a) The Permittee may store a total volume of 910,000 gallons of hazardous waste in 11 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 No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Hazardous Waste No.
Tank OL-1	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-2	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-3	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-4	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-5	30,000	12 ft. (Dia) * 35 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-6	30,000	12 ft. (Dia) * 35 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-7	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-8	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-9	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))

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Tank OL-10	150,000	30 ft. (Dia) * 30 ft.	Yes – to be constructed prior to placing tank into service	Waste organic solvents	(see D.1.(c))
Tank OL-11	150,000	30 ft. (Dia) * 30 ft.	Yes – to be constructed prior to placing tank in service	Waste organic solvents	(see D.1.(c))

- (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 must store in tanks only the hazardous waste codes specified in the permit application and summarized below:

D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043.

F001, F002, F003, F004, F005, F006, F007, F008, F009, F010, F011, F012, F019, F024, F025, F034, F035, F037, F038, F039.

K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K062, K069, K071, K073, K083, K084, K085, K086, K087, K088, K093, K094, K095, K096, K097, K098, K099, K100, K101, K102, K103, K104, K105, K106, K107, K108, K109, K110, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K131, K132, K136, K141, K142, K143, K144, K145, K147, K148, K149, K150, K151, K156, K157, K158, K159, K161, K169, K170, K171, K172, K174, K175, K176, K177, K178, K181.

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070,

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U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136, U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U151, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U271, U278, U279, U280, U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, U411.

P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P076, P077, P078, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P106, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P121, P122, P123, P127, P128, P185, P188, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201, P202, P203, P204, P205.

- (d) The Permittee is prohibited from storing hazardous waste that is not identified in this permit condition.
- (e) The Permittee must not accept any waste constituent into tank storage that has a physical characteristic of being a gas at ambient temperature and pressure. This provision shall not preclude particular waste codes due to "derived from" rules.

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 may treat by blending 48,809 pounds per

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hour of hazardous waste. The Permittee shall treat in tanks only the hazardous waste codes specified in the permit application and summarized below:

Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Hazardous Waste No.
Tank OL-1	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-2	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-3	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-4	25,000	12 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-5	30,000	12 ft. (Dia) * 35 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-6	30,000	12 ft. (Dia) * 35 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-7	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-8	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-9	150,000	30 ft. (Dia) * 30 ft.	Yes – in place	Waste organic solvents	(see D.1.(c))
Tank OL-10	150,000	30 ft. (Dia) * 30 ft.	Yes – to be constructed prior to placing tank into service	Waste organic solvents	(see D.1.(c))
Tank OL-11	150,000	30 ft. (Dia) * 30 ft.	Yes – to be constructed prior to placing tank in service	Waste organic solvents	(see 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. However, when treating waste in tanks in accordance with OAC Rule 3745-52-34, the Permittee shall not, for the total amount of hazardous waste treated, exceed the maximum throughput capacity established under this Condition.

D.3 Design and Installation of New Tank Systems or Components
OAC Rule 3745-55-92

- (a) The Permittee must construct the tank system in accordance with Section 4 of the permit application.
- (b) Prior to operation of the newly constructed tank system, the Permittee must submit the certification of installation of the tank system in accordance with OAC rule 3745-55-92(B) to ensure that proper handling procedures were adhered to in order to prevent damage to the system during installation.

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

The Permittee must construct and operate the secondary containment system in accordance with the requirements of OAC Rule 3745-55-93(B) through (F) and Section 4 of the permit application.

(a) New Tank Systems

The Permittee must construct and operate the secondary containment system in accordance with requirements of 3745-55-93(B) through (F), and Section 4 of the permit application.

New tanks at the facility are OL-1, OL-2, OL-3, OL-4, OL-5, OL-6, OL-8, and OL-9.

- (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 the permit application.

The Existing tank at the facility is: OL-7

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 5 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) The Permittee must document compliance with Permit Condition D.6 in the operating record of the facility.

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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, 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)(vi) are satisfied, the Permittee must close its tank system in accordance with OAC Rule 3745-55-97 and its closure plan if there has been a leak or spill from the tank system, 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.

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- (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.
 - (iv) For a release to the environment caused by a leak from the aboveground portion of the tank system that does not have secondary containment, and can be visually inspected, the Permittee must repair the tank system in accordance with Permit Condition D.7(c) before returning it to service.
 - (v) For a release to the environment caused by a leak from the portion of the tank system component that is not readily available for visual inspection, the Permittee must provide secondary containment for the entire component that meets the requirements of OAC Rule 3745-55-93 before the component can be returned to service.
 - (vi) If the Permittee replaces a component of the tank system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in OAC Rules 3745-55-92 and 3745-55-93.
- (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 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

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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 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 downgradient drinking water, surface water, and populated areas; and
 - (v) Description of response actions taken or planned.
- (c) The Permittee must obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of the tank system.
- (d) The Permittee must keep on file at the facility the written assessment of the tank system's integrity.

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 8 of the permit application.

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- (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.

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 Special Tank Provisions for Incompatible Wastes
OAC Rule 3745-55-99

- (a) The Permittee must not place incompatible wastes, or incompatible wastes and materials, in the same tank system or the same secondary containment system, unless the procedures specified in the permit application are followed. The Permittee must document compliance with this condition and place that documentation into the operating record.
- (b) The Permittee must not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless the requirements of Permit Condition D.11(a) are met.

MODULE E – CORRECTIVE ACTION REQUIREMENTS

E. Corrective Action Summary

On August 26 and 27, 1992, a RCRA Facility Assessment (RFA) was performed at the OHD987048733 facility (f.k.a. Lafarge Corporation), Paulding county, located on County Road 176 by A.T. Kearney, Incorporated, a contractor for the United States Environmental Protection Agency (U.S. EPA). The RFA consisted of a preliminary review of existing facility information and a visual site inspection. Systech Environmental Corporation, a wholly-owned subsidiary of the OHD987048733 facility (f.k.a. Lafarge Corporation), operates within the boundaries of the OHD987048733 facility and was included as part of the RFA. An RFA report was submitted to U.S. EPA on November 10, 1992. The RFA report identified 37 Solid Waste Management Units (SWMU's), twenty (20) of which are on Systech Property. Based on the information in the RFA report, U.S. EPA determined that 9 of the SWMU's require further investigation under a RCRA Facility Investigation (RFI).

On July 17, 1995, an RFI workplan was submitted to U.S. EPA by Midwest Environmental Consultants, Inc. on behalf of Systech. The RFI Workplan was never reviewed or approved by U.S. EPA.

U.S. EPA transferred authority for oversight of corrective action to Ohio EPA upon issuance of the permit by Ohio EPA on August 8, 2003. SWMU is a term used by U.S. EPA and is equivalent to the term Waste Management Unit (WMU) used by Ohio EPA. The two terms are considered interchangeable.

The nine WMUs and four locations were ultimately combined into two investigatory groups as follows:

Group A

1. Organic Liquid Storage Tanks Nos. 1-6 (SWMUs 5-10)
2. Oil/Water Separator (SWMU No. 18)
3. Rail Off Loading Area (SWMU No. 21)

Group B

4. Organic Liquid Burn Tanks No. 7 (SWMUs 11, 11A, 11B)

The 2003 permit required Systech to conduct a RCRA Facility Investigation (RFI). On October 31, 2003, Systech (or Permittee) submitted to Ohio EPA a Phase I RFI Work Plan for its Facility. The RFI work plan was revised on April 27, 2005, June 10, 2005, and June 16, 2005, and approved on June 23, 2005. The completed Phase I report was accepted by Ohio EPA in 2006. Following completion of the Phase I RFI, Systech submitted a Phase II RFI work plan that was accepted in July 2006. The completed Phase II RFI Report was submitted on January 12, 2009, revised on December 3, 2009, September 7, 2010, May 17, 2011, and

March 12, 2012. The RFI Phase II report was approved on October 16, 2012, with a requirement to submit a Corrective Measures Study (CMS) by January 14, 2013.

On December 12, 2012, Ohio EPA received a letter from Systech stating that there were no substantive changes made to the CMS submitted on January 12, 2009 and that Ohio EPA should consider the submittal to constitute Systech's CMS. On February 18, 2014, Ohio EPA received a revised CMS from the Permittee. On January 25, 2016, Ohio EPA received a revised Groundwater Monitored Natural Attenuation Plan to be incorporated by reference into the CMS.

The Permittee's CMS included corrective measures for the former oil/water separator (SWMU No. 18) and the SB-17 power pole area (SWMU No. 21). Ohio EPA has reviewed the documents and selected remedies that are outlined in Permit Condition E.9(d).

The documents referenced above are incorporated into the permit and will be governed by the conditions in this module and the applicable corrective action rules.

E.1 Corrective Action at the Facility
OAC Rules 3745-50-10 and 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), construction and demolition debris (as defined in ORC Chapter 3714), industrial waste, or other waste (as those terms are defined in ORC Chapter 6111), has been placed at any time, irrespective of whether the unit was intended for the management of waste or hazardous waste. Such units include any area at a facility at which wastes have been routinely and systematically released. For the purpose of Corrective Action, facility is defined as all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. The terms Interim Measure (IM), RCRA Facility Investigation (RFI), Corrective Measures Study (CMS) and Corrective Measure Implementation (CMI) are defined in U.S. EPA's Corrective Action Plan (CAP) (OSWER Directive 9902.3-2A, May 1994).

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

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

The Permittee must implement Corrective Action beyond the Facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of Ohio EPA that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated

beyond the Facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RFI, CMS, and CMI phases, as determined to be necessary on a case-by-case basis.

E.3 Identification of WMUs

OAC Rules 3745-50-44(D) and 3745-54-101

- (a) The WMUs listed below were addressed in the RFI. The RFI addressed ground water, surface water, soil, waste, and air media associated with each of the WMUs unless otherwise noted in the list below:

WMU Investigatory Group	WMU Number and Description
WMU Group A	WMU 5 - Organic Liquid Storage Tank OL-1
	WMU 6 - Organic Liquid Storage Tank OL-2
	WMU 7 - Organic Liquid Storage Tank OL-3
	WMU 8 - Organic Liquid Storage Tank OL-4
	WMU 9 - Organic Liquid Storage Tank OL-5
	WMU 10 - Organic Liquid Storage Tank OL-6
	WMU 18 - Oil/Water Separator
	WMU 21 - Rail Off-Loading Area
	WMU 11 - Organic Liquid Burn Tank No. 7 (The containment area contains OL-7, OL-8, and OL-9)
WMU Group B	

- (b) The following WMUs were carried forward in the CMS:

WMU	WMU Description
WMU 18	Oil/Water Separator
WMU 21 (SB-17)	Rail Off-Loading Area (Power Pole Area)

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 Condition E.3. above and 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)

Based on the RFI Final Report or other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require the development and

implementation of an interim measure (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 Class 3 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 will 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 alternatives(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 has submitted a written CMS Workplan to Ohio EPA.

- (i) Within 60 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 60 days of receipt of any Ohio EPA comments, the Permittee must submit either an amended or new CMS Final Report that incorporates Ohio EPA's comments.
- (ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMS Final Report. The CMS Final Report, as approved or as

modified and approved, must be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved CMS Final Report must be authorized by Ohio EPA.

E.9 Corrective Measures Implementation (CMI)

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

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

(a) Permit Modification

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

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

(b) CMI Workplan

The Permittee must submit a written CMI Workplan to Ohio EPA within ninety (90) days from the notification by Ohio EPA of the requirement to implement corrective measures. The CMI Workplan must contain the Specific Remedies as outlined below.

- (i) Within forty-five (45) days of receipt of Ohio EPA's comments, the Permittee must submit either an amended or new CMI Workplan that addresses Ohio EPA's comments.
- (ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMI Workplan. The CMI 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 CMI Workplan must be authorized by Ohio EPA.

(c) CMI Workplan Implementation

The Permittee must implement the CMI Workplan according to the terms and schedule in the approved CMI Workplan.

(d) Corrective Measures Specific Remedies

Ohio EPA has determined that a combination of removal, institutional controls/environmental covenants and ground water monitoring will be effective and reliable corrective measures for SWMU 18 (oil/water separator area) and SWMU 21 (SB 17 power pole area).

- (i) The Permittee must implement corrective measures at SWMU 18 as described in the Monitored Natural Attenuation Plan (revised January 25, 2016) and included by reference in Appendix C of the Corrective Measures Study.

The Permittee must implement the pump and treat contingent remedy in SWMU 18, if the following conditions exist:

- (a) Concentrations of Constituents of Concern (COCs) show an increasing trend; and
- (b) The contaminated ground water plume increases in size.

- (ii) The Permittee must implement corrective measures in SWMU 21 as described below:

- (a) Removal of soil in an approximately 25 square foot area around SB-17 to a minimum depth of three (3) feet;
- (b) Removal of soil until the concentration of benzo(a)pyrene is below 210 µg/kg as confirmed by analytical testing;
- (c) Excavation, characterization, and disposal of soils in accordance with applicable federal and state laws and regulations; and
- (d) Backfill of the excavation with soils meeting background concentrations.

- (iii) Within forty-five (45) days after issuance of the director initiated permit modification, the Permittee must obtain an Environmental Covenant in accordance with Ohio's Environmental Covenant law, Ohio Revised Code sections 5301.8 to 5301.92, that will declare the site is restricted to industrial use only and prohibit the use of on-site ground water for potable purposes.

(e) Financial Assurance
OAC Rule 3745-54-101

Within 45 days after receiving approval of the CMI, the Permittee must provide financial assurance in the amount necessary to implement the corrective measure(s) as required by OAC Rule 3745-54-101(b) and (c).

E.10. NEWLY IDENTIFIED WMUs OR RELEASES
OAC Rule 3745-54-101

(a) General Information

The Permittee must submit to Ohio EPA, within 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;
- (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.

MODULE G - GROUND WATER MONITORING

G. GROUND WATER MONITORING

This module addresses the ground water monitoring program associated with the former Oil/Water Separator (Solid Waste Management Unit/Area 18) for Systech Environmental Corporation's (Systech) Facility. This unit is monitored under the Part B Permit rules OAC Rules 3745-54-90 through 101. Upon approval of this permit, the Permittee shall conduct a ground water corrective action monitoring program under the permitted facility rules.

The former Oil/Water Separator was located along the northeast corner of the above ground storage tank farm and just outside of the secondary containment. The unit was designed to process onsite stormwater prior to discharge. Oil that was recovered from the unit was returned to onsite storage tanks for potential use as a kiln fuel. Leftover stormwater was discharged to an onsite drainage ditch. Systech closed the unit in 1992 by disconnecting the piping, filling it with an inert solid and then concreting it in-place. The unit was identified during a RFI Phase I as having potentially managed contaminated stormwater.

The Permittee's corrective action ground water monitoring system presently consists of four (4) monitoring wells: two (2) downgradient/sidegradient wells (MW-1 and MW-4) and two (2) upgradient wells (MW-3 and MW-5) where the screened intervals range from 4-10 feet below ground surface (bgs). All four wells are screened in a shallow perched saturated zone consisting of fill (sand and gravel) which extends down to a depth of approximately 8 feet bgs in the immediate area. The shallow perched zone is discontinuous and is separated from the regional uppermost aquifer (Dundee Limestone) by a 40-45 foot thick layer of lacustrine clay and a 15-20 foot thickness of dolomite (Ten Mile Creek formation).

G.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 101 for purposes of detecting, characterizing, and responding to releases to and from the shallow perched saturated zone for the following unit/area as required in the Statement of Basis

Solid Waste Management Unit/Area – 18 (Oil/Water Separator), hereafter referred to as the Unit/Area, is shown in attached Figure G-1.

- (b) Reserved

- (c) The Permittee is subject to OAC Rules 3745-54-90 through 101 and must conduct a monitoring and response program as follows:

Hazardous constituents under OAC Rule 3745-54-93 from the Unit/Area have been detected in the ground water between the identified unit boundary and the downgradient Facility property boundary. A site-wide RFI and CMS have been conducted. The final RFI and CMS reports have been submitted, and the final RFI report was approved by Ohio EPA on October 16, 2012 and the revised CMS report was received by Ohio EPA on February 18, 2014. As detailed in Module E, Ohio EPA has selected corrective measures for the Unit/Area identified in Permit Condition G.1(a). Therefore, the Permittee must institute a corrective action program in accordance with Permit Condition G.11 and OAC Rule 3745-54-100 through 101(C) to protect human health and the environment for all releases of hazardous wastes or constituents from the Unit/Area and to bring the Unit/Area back into compliance with the standards outlined in Permit Condition G.11.

G.2 Ground Water Protection Standard (GWPS)

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

Compliance with the GWPS will be met by fulfilling the Monitored Natural Attenuation (MNA) Constituents & Performance Requirements outlined in the Statement of Basis and Module G. The MNA Performance Requirements as described in Module G will hereafter be referred to as the GWPS. The Permittee must ensure that the hazardous constituents under OAC Rule 3745-54-93 detected in the ground water from the Unit/Area listed in Permit Condition G.1(a) do not exceed the concentration limits under OAC Rule 3745-54-94 in the shallow perched saturated zone 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 GWPS has been established in this Permit due to hazardous constituents being detected in the ground water.

(a) Hazardous Constituents and Concentration Limits

OAC Rules 3745-54-93 & 94, and 100(A)(1) and (2)

The Permittee must monitor the ground water to determine whether the Unit/Area is in compliance with the GWPS under OAC Rule 3745-54-92. The site-specific hazardous constituents are those detected in the ground water above their respective PQLs underlying the Unit/Area and reasonably expected to be contained in or derived from the Unit/Area to which the GWPS applies. The site-specific hazardous constituents and their Concentration Limits are listed in Table G-1 below:

Table G-1 Hazardous Constituents and Concentration Limits

Hazardous Constituents	Concentration Limit (ug/l)
Arsenic (dissolved)	10
Benzene	5
2-Butanone (MEK)	5,600*
Carbon Disulfide	810*
Chlorobenzene	100
Cobalt (dissolved)	6*
1,2-Dichlorobenzene	600
1,4-Dichlorobenzene	75
1,1-Dichloroethane	27*
Cis-1,2-Dichloroethylene	70
Trans-1,2-dichloroethylene	100
Diethyl phthalate	15,000*
Ethylbenzene	700
Lead (dissolved)	15
2-Methylnapthalene	36*
Napthalene	1.7*
Tetrachloroethylene	5
Toluene	1,000
Trichloroethylene	5
Vanadium (dissolved)	86*
Vinyl Chloride	2
Xylene	10,000
Zinc (dissolved)	6,000*

Note:

* Risk goal is based on single chemical concentrations. Non-cancer target values are from the June 2015 Tapwater Regional Screening Level (RSL) Table. Non-cancer target groundwater concentrations are based on a hazard quotient (HQ) of 1. For Chemicals of Concern (COCs) without an MCL, risk-based non-cancer target groundwater concentrations must be cumulatively adjusted if more than one COC is present. Single chemical cancer target groundwater concentrations are based on carcinogenic values from the June 2015 Tapwater RSL Table. For Chemicals of Concern (COCs) without an MCL, risk-based cancer target groundwater concentrations must be cumulatively adjusted if more than one COC is present.

The Permittee must also monitor parameters noted in Table G-2 below for field measurements and to evaluate the degree of natural attenuation:

Table G-2 Field/Attenuation Parameters :

Parameters	Stabilization Criteria / Preservation	Target PQL (mg/l)
Temperature	$\pm 0.5^{\circ}$ Celsius ¹	Field Measurement
pH	± 0.2 standard units ¹	Field Measurement
Conductivity	$\pm 3\%$ ¹	Field Measurement
Dissolved Oxygen	$\pm 10\%$ of reading value or $+ 0.2$ mg/l, whichever is greater ¹	Field Measurement
Oxidation-reduction potential (ORP)	± 20 millivolts ¹	Field Measurement
Turbidity	less than or equal to 10 NTUs, or $\pm 10\%$ if turbidity is > 10 NTUs ¹	Field Measurement
Iron	HNO ₃ to pH < 2 , at least 24-hours prior to analysis ¹	0.050
Sulfate	Cool 0-6° C ¹	5.0
Nitrate	Cool 0-6° C ¹	0.1

Note:

1 Ohio EPA Technical Guidance for Ground Water Investigations (Chapter 10, Revised May 2012).

- (b) Point of Compliance
OAC Rules 3745-54-91(A)(3)/3745-54-95, and 3745-54-100(A)(3) & (E)(1)

The point of compliance at which the GWPS of OAC Rule 3745-54-92 applies is described in Section 2.1.2 and on Figure 3 of the Monitored Natural Attenuation Plan - Paulding Co-Processing Facility (hereafter referred to as the MNAP) (Note: the point of compliance is the approximated extent of the perched groundwater zone as noted in the legend on Figure 3 (and Figure G-1, attached)). The Permittee must monitor the following wells: MW-1, MW-3, MW-4 and MW-5 identified in

Permit Condition G.3(b) 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 Facility property boundary to determine if any Concentration Limits have been exceeded at any point between the compliance point and the downgradient Facility property boundary.

If it is determined after the first quarterly sampling event specified in Permit Condition G.6 that any Concentration Limit found in Table G-1 is exceeded at any well specified in Table G-3, then the Permittee will consult with Ohio EPA to determine the need for the installation and sampling of additional wells necessary to protect human health and the environment. Within ninety (90) days from the date of the above determination, the Permittee shall submit an application for a permit modification pursuant to OAC Rule 3745-50-51 to make any appropriate changes to the program. The installation of any additional well(s) shall conform to those applicable performance standards set forth in Permit Condition G.3. If no Concentration Limit found in Table G-1 is exceeded at any well specified in Table G-3 after the first quarterly sampling event, the Permittee shall implement ground water monitoring in support of corrective action as specified in this Module (G).

(c) Compliance Period
OAC Rule 3745-54-96

- (i) The compliance period during which the GWPS of OAC Rule 3745-54-92 applies is equal to the permit period. The permit must continue to be renewed until all hazardous constituents in ground water are below the Concentration Limits found in Table G-1 for three consecutive years per Permit Condition G.11(f). During the compliance period, the Permittee must establish and implement a monitoring program that will detect, respond and report as necessary to protect human health and the environment all releases of hazardous constituents above the Concentration Limits listed in Table G-1.
- (ii) If the Permittee is engaged in a corrective action program at the end of the compliance period specified above, the compliance period is extended until the Permittee can demonstrate that the GWPS of OAC Rule 3745-54-92 has not been exceeded for a period of three consecutive years and that contaminated ground water in the shallow perched saturated zone displays a decreasing trend of the hazardous constituents listed in Table G-1 in Permit Condition G.2(a).
- (iii) The Permittee may discontinue corrective action activities during

the compliance period as specified in Permit Condition G.11(e)(iv).

(iv) Reserved

G.3 Well Location, Installation, Maintenance, and Removal
OAC Rules 3745-54-95, 3745-54-97(A) to (C), and 3745-54-100(D) & (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 perched saturated zone. The samples must:
 - (i) Represent the quality of background water that has not been affected by leakage from the Unit/Area;
 - (ii) Represent the quality of ground water passing the point of compliance, between the point of compliance and the downgradient Facility property boundary, and beyond the Facility property boundary, where necessary, to protect human health and the environment. The point of compliance, as defined in OAC Rule 3745-54-95, is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer (shallow perched saturated zone) underlying the regulated unit/area;
 - (iii) Allow for the detection and measurement of contamination for all potential release pathways to the shallow perched saturated zone from the Unit/Area based on site-specific hydrogeologic characterization; and
 - (iv) Reserved
 - (v) Demonstrate the effectiveness of the corrective action program. The monitoring 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 monitoring wells as specified in Section 2.1 and Figure 3 of the MNAP and Figure G-1 of this Permit in conformance with Table G-3:

Table G-3 Ground Water Monitoring Wells

Unit/Area Name	Monitored Zone	Type of Well	Well ID
WMU-18	shallow perched saturated zone	Background/ Upgradient	MW-3, MW-5
		Sidegradient	MW-4
WMU-18	shallow perched saturated zone	Point of Compliance (downgradient)	MW-1

- (c) Monitoring wells identified in Permit Condition G.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 2.1.1 of the MNAP. 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. Appendix A of the MNAP contains ground water monitoring well construction diagrams which illustrate compliance with OAC Rule 3745-54-97(A) to (C).
- (d) The Permittee must remove or replace any monitoring well in Permit Condition G.3(b) in accordance with the Appendix to OAC Rule 3745-50-51 permit modification process. Each change must be accompanied by a revised well location map to replace Figure 3 in the MNAP and Figure G-1 of this Permit referenced in Permit Condition G.3(b).
- (e) Whenever any of the wells specified in Permit Condition G.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 G.3(a) within a 365 day period of the date of replacement using means appropriate to the reason for replacement.
- (f) The Permittee must record in the Facility's operating record the total depth of any replacement wells installed in accordance with Permit Condition G.3(e) and the surveyed elevation of the top of casing, ground surface and/or apron elevation, and the protective casing of the monitoring well(s) within thirty (30) days of the date of installation (with as-built drawings and latitude/longitude measurements).
- (g) The Permittee shall maintain the monitoring wells identified in Permit Condition G.3(b) in accordance with the detailed plans and specifications presented in Section 2.1 of the MNAP.

- (h) All monitoring wells removed or replaced in accordance with Permit Condition G.3(e) shall be plugged and abandoned in accordance with Chapter 9 of the Ohio EPA Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring. Well plugging and abandonment methods, certification and justification shall be submitted to the Director within thirty (30) days from the date the well was removed from the monitoring program.

G.4 Sampling and Analysis Procedures
OAC Rule 3745-54-97 (D) and (E)

- (a) The Permittee must submit and implement a ground water monitoring program that meets corresponding performance standards found in the most recent version of Ohio EPA's Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring. 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, Section 2.2 of the MNAP, 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 2.3.5 of the MNAP.

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

The Permittee must determine the ground water surface elevation at each well identified in Table G-3 of Permit Condition G.3(b) each time ground water is sampled at that well using the methods in Section 2.2.1 of the MNAP.

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

Data on each constituent specified in Table G-1 and G-2 in Permit Condition G.2(a) will be collected quarterly from those wells identified in Table G-3 in Permit Condition G.3(b) [MW-1, MW-3, MW-4 and MW-5] during the first year of sampling; semiannually during the second year of sampling and annually thereafter. The sampling procedure and interval for each constituent are

described in Sections 2.2 and 2.5 of the MNAP.

- (a) Reserved
- (b) Reserved
- (c) Reserved

G.7 Statistical Procedures
OAC Rule 3745-54-97 (H) and (I)

The Permittee must use the following statistical procedures in evaluating ground water monitoring results for each hazardous constituent in Permit Condition G.2(a) in each monitoring well in Permit Condition G.3(b) to identify statistically significant evidence of the effectiveness of corrective action:

- (a) Reserved
- (b) The Permittee's statistical procedures must be protective of human health and the environment, provide reasonable confidence that the migration of hazardous constituents from the Unit/Area into and through the shallow perched saturated zone will be indicated, will determine whether such leakage of hazardous constituents into the ground water exceeds specified concentration limits and have the ability to determine the effectiveness of corrective action. 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 Table G-1 in Permit Condition G.2(a) in each well identified in Table G-2 in Permit Condition G.3(b) by comparing ground water analytical data to the Concentration Limits specified in Table G-1 on a one-to-one basis following each sampling event. For each of the constituents identified in Table G-1, within the third year after beginning corrective action implementation, the Permittee shall present a graph of analysis results versus time using all historical analysis results. The Permittee shall provide a qualitative discussion concerning any anomalies, trends or changes in ground water in accordance with Permit Condition G.8(b).
 - (ii) Reserved
 - (iii) Reserved
 - (iv) Reserved

(v) Reserved

(vi) When practical quantitation limits (PQLs) are used in any statistical procedures, the PQL must be approved in the permit as part of the statistical procedures in Condition G.7. The statistical method must account for data below the limit of detection with one or more statistical procedures. 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 Permittee per OAC Rule 3745-54-97(I)(5).

(vii) Reserved

G.8 Operating Record and Reporting

OAC Rules 3745-50-58(H-L), 54-73(B)(5) and (6), 77(C), 97(J), and 100(G)

(a) Operating Record

The Permittee must enter all of the following information obtained in accordance with Permit Module G 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 the MNAP including documentation of parameter omissions during the sampling event;
- (vi) The date the Permittee received the results from the laboratory;
- (vii) The date the owner or operator accuracy and precision of the analytical data and determined its quality;

- (viii) The results of the data validation review per Permit Condition G.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;
 - (ix) Results of all blanks and duplicates (trip, field, equipment, and method);
 - (x) Results of the field parameters;
 - (xi) Any statistical evaluation of the data (must include all computations, results of statistical tests, and 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;
 - (xiv) Data and results of the annual determination of the ground water flow rate and semiannual determination of ground water flow direction and potentiometric surface;
 - (xv) Evaluation of the whether the ground water monitoring system still consists of a sufficient number of wells installed at appropriate locations and depths to meet the requirements of Permit Condition G.3.
 - (xvi) The results of the last three years of all inspections required under OAC Rule 3745-54-15(D) related to ground water monitoring and equipment as required under OAC Rule 3745-54-73(B)(5).
 - (xvii) Evaluation of the efficiency of the corrective actions performed to bring the ground water quality into compliance with the GWPS per Permit Condition G.2 including comparisons to Concentration Limits in Table G-1.
- (b) Annual, Semi-Annual & Other Periodic Required Reporting
- (i) Required Annual Reporting

The Permittee must submit a Supplementary Annual Ground Water

Monitoring Report to the Director by March 1st of the following year. 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 generally do not need to include duplicates of hard copies previously submitted.

The Supplementary Annual Ground Water Monitoring Report must include, at a minimum, the analytical results required by Permit Conditions G.6 and G.11, the ground water elevation data required by Permit Condition G.5 and G.8(a)(xiii - xv), the results of any statistical analyses required by Permit Condition G.7 and G.11, and the evaluations in G.8(a)(xvii). 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 in accordance with the annual reporting form supplied by the Director and OAC Rule 3745-54-97(J).

(ii) Required Quarterly/Semiannual/Annual Reports

Reports will be due seventy-five (75) days after each quarterly, semi-annual and annual sampling event and must include a potentiometric surface map (including water levels), laboratory analytical results, field sample and stabilization forms, summary tables, documentation of deviations in sampling procedures and data evaluation including comparisons to Concentration Limits in Table G-1.

(iii) Required Corrective Action Effectiveness Annual Reporting

The Permittee must report, in writing, annually to the Director on the effectiveness of the Monitored Natural Attenuation (MNA) corrective action program. These reports must be submitted on March 1 of each year until the corrective action program has been completed. This report may be combined with the required annual reporting in Permit Condition G.8(b)(i). Each report must reference the titles and dates of any other periodic reports required by the permit or any updates to those reports, but generally does not need to include duplicates of hard copies previously submitted. The annual reports must include, at a minimum, the analytical results required by Permit Conditions G.5 and G.6, and the results of the statistical analyses required by Permit Condition G.7.

This report shall include:

- a. progress in meeting the GWPS;
- b. projected time frame for meeting the GWPS;
- c. a summary of newly acquired data since the last report;
- d. the effectiveness of the institutional controls;
- e. a trend analysis for constituents listed in Table G-1;
- f. any statistical evaluations from Permit Condition G.7; and
- g. an evaluation of whether MNA remains a timely and effective remediation strategy in accordance with the response requirements in G.11(b).

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

The Permittee must comply with any reporting requirements that become necessary under Permit Condition G.11 in accordance with the schedules covered by that permit condition and as required by OAC Rule 3745-54-77(C).

G.9 Detection Monitoring Program (Reserved)

G.10 Compliance Monitoring Program (Reserved)

G.11 Corrective Action Program
OAC Rules 3745-50-44(B)(8), 3745-54-100 and 3745-54-101(C)

- (a) 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 the Unit/Area is in compliance with the GWPS in OAC Rule 3745-54-92 as specified in Permit Condition G.2.
- (b) The Permittee must implement a corrective action program that prevents hazardous constituents specified in Permit Condition G.2(a) from exceeding their respective Concentration Limits specified in Table G-1 at

the compliance point specified in Permit Condition G.2(b) by removing the hazardous waste constituents or by treating them in place. The Permittee shall implement MNA at the Unit/Area with ground water monitoring.

- (c) The Permittee must begin corrective action required under this Permit Condition upon approval of this permit modification.
- (d) In conjunction with the corrective action program, the Permittee must establish and implement a ground water monitoring program to fully characterize contaminated ground water as required by OAC Rule 3745-50-44(B)(8)(a) and to demonstrate the effectiveness of the corrective action program. Ground water monitoring must be as effective as the compliance monitoring program in OAC Rule 3745-54-99 in determining compliance with the GWPS in Permit Condition G.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 G.2(b), and, as necessary to protect human health and the environment, between the compliance point and the downgradient Facility property boundary and beyond the Facility property boundary. The ground water monitoring system must comply with the requirements in Permit Condition G.3.
 - (ii) Collection, preservation, and analysis of samples conducted pursuant to Permit Conditions G.4, G.5, and G.6. Statistical analysis must be conducted pursuant to Permit Condition G.7.
 - (iii) The Permittee must conduct a sampling program for each chemical parameter and hazardous constituent specified in Permit Condition G.2(a) from each well specified in Permit Condition G.3(b) [MW-1, MW-3, MW-4 and MW-5] during the compliance period and any extensions due to corrective action implementation. The sampling procedure and frequency for each well is described in Sections 2.2 and 2.5 of the MNAP; data will be collected quarterly during the first year of sampling; semiannually during the second year of sampling and annually thereafter.
 - (iv) The Permittee must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under Permit Conditions G.7 and G.8 for the compliance period defined in Permit Condition G.2(c).
 - (v) The Permittee must determine the ground water flow rate annually

and direction of flow in the shallow perched saturated zone semiannually after each sampling event specified under Permit Condition G.6 for the compliance period defined in Permit Condition G.2(c) using the procedures specified in Section 2.4 of the MNAP. The Permittee must submit the determinations in accordance with Permit Conditions G.8(b)(i) and (ii).

- (vi) Reserved
- (vii) Reserved
- (viii) Reserved
- (e) The Permittee must conduct a corrective action program to remove or treat in place any hazardous constituents specified in Permit Condition G.2(a) that exceed their respective concentration limits specified in Permit Condition G.2(a) in ground water:
 - (i) Between the compliance point specified in Permit Condition G.2(b) and the downgradient facility property boundary, in accordance with the procedures specified in the Permit Application.
 - (ii) Beyond the Facility boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to Ohio EPA that, despite the Permittee's best efforts, the Permittee 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) Corrective action measures required under Permit Condition G.11(e) must be initiated within 180 days of permit approval
 - (iv) Corrective measures under Permit Condition G.11(e) may be terminated once the GWPS detailed in Permit Condition G.2 has not been exceeded for three consecutive years in accordance with OAC Rule 3745-54-100 and concentrations of hazardous constituents noted in Permit Condition G.2(b) display a decreasing trend.
- (f) The Permittee must continue corrective action measures during the compliance period specified in Permit Condition G.2(c) to the extent necessary to ensure that the GWPS are not exceeded.

If the Permittee is conducting corrective action at the end of the compliance period, the Permittee must continue corrective action for as long as necessary to achieve compliance with the GWPS. 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 Condition G.11(d), that the GWPS detailed in Permit Condition G.2 has not been exceeded for three consecutive years in accordance with OAC Rule 3745-54-100 and concentrations of hazardous constituents noted in Permit Condition G.2(b) display a decreasing trend.

- (i) If after three years of implementing the MNA alternative, the GWPS continues to be exceeded and/or hazardous constituents display an increasing trend, then a contingency alternative will be implemented as detailed in Section 3.0 of the MNAP. As part of this contingency, installation and sampling of additional wells may be necessary to protect human health and the environment. Within ninety (90) days from the date of the above determination, the contingency alternative must be initiated and a schedule submitted of detailed plans. The corrective action must be implemented within one hundred eighty (180) days from the date of the above determination.
- (g) The Permittee must report in writing to the Director on the effectiveness of the MNA corrective action monitoring program annually according to Permit Condition G.8(b)(iii).
- (h) If the Permittee determines the corrective action program established by this permit 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 pursuant to OAC Rule 3745-50-51 to make any appropriate changes to the program.

End of Permit Conditions

Attachment 1

**Figure G-1
Waste Management Unit / Area – 18
Oil / Water Separator**

