OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO HAZARDOUS WASTE FACILITY
INSTALLATION AND OPERATION PERMIT RENEWAL

Permittee: The Lubrizol Corporation

Mailing Address: The Lubrizol Corporation
155 Freedom Rd.
Painesville, OH 44077

Owner: The Lubrizol Corporation
29400 Lakeland Blvd.
Wickliffe, OH 44092

Operator: The Lubrizol Corporation
29400 Lakeland Blvd.
Wickliffe, OH 44092

Location: The Lubrizol Corporation
155 Freedom Rd.
Painesville, OH 44077

US EPA ID: OHD 004 172 623
Issue Date: March 31, 2004
Effective Date: March 31, 2004
Expiration Date: March 31, 2014

AUTHORIZED ACTIVITIES

In reference to the application of The Lubrizol 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 and Treatment in Tanks
♦ Treatment by Incineration
♦ Corrective Action

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OHIO EPA NEDO
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Ohio Permit No.: 02-43-0176
US EPA ID: OHD 004172623
Issue Date: 03/31/2004
Effective Date: 03/31/2004
Expiration Date: 03/31/2009

AUTHORIZED ACTIVITIES

In reference to the application of The Lubrizol 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 and Treatment in Tanks
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PERMIT APPROVAL

Christopher Jones, 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 31 day of March, 2004.

By [Signature] of the Ohio Environmental Protection Agency.
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 treat and store hazardous waste in tanks, and treat hazardous waste in an incinerator 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 and last updated on September 18, 2003 is hereby incorporated into this permit. In the instance of inconsistent language or discrepancies between the above, the language of the more stringent provision shall govern.

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

A.2 Permit Actions

OAC Rule 3745-50-58(F)

This permit may be modified or revoked as specified by Ohio law. The filing of a request by the Permittee for a permit modification, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay any permit term or condition.
A.3 Permit Effective/Expiration Date
OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director's Journal. The permit expiration date is ten 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 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) 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 Rule 3745-50-30.

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

(a) Any sample and measurement taken for the purpose of monitoring must be representative of the monitored activity. Further, a sample must be a representative sample, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of OAC Rule 3745-51-20, Laboratory Methods. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste: Physical/Chemical Methods; SW-846; Third Edition, November 1992; 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).
Retention of Records
OAC Rules 3745-50-40(G), 3745-50-58(J) and 3745-50-58(M)

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

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

(c) The Permittee must maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the permit application and any amendments, supplements or modifications of such application and must retain a complete copy of the application for a period of at least five (5) years from the effective date of the permit.

(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.

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.

Waste Shipments
OAC Rule 3745-52-12, 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.

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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 Emergency and Remedial Response 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:
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 Emergency and Remedial Response and the Division of Hazardous Waste Management Northeast 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.

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

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

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

A.23 Reserved

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

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

A.25 Confidential Information
OAC Rule 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 Fee
OAC Rule 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 Rule 3745-50-50, OAC 3745-50-51

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

Ohio EPA, Director
P.O. Box 1049
Columbus, Ohio 43216-1049

Ohio EPA, DHWM
Attn: Regulatory and Information Services Section
P.O. Box 1049
Columbus, Ohio 43216-1049

Ohio EPA Northeast District Office
2100 East Aurora Road
Twinsburg, Ohio 44087
Attn: DHWM/Lubrizol Painesville Facility Inspector

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

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

Section I of the permit application containing the financial assurance mechanism 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 Rules 3745-55-43 and 3745-55-45

Section I of the permit application containing the financial assurance mechanism for closure must be updated to include a copy of the current financial assurance mechanism, as set forth in OAC Rules 3745-55-43 and 3745-55-45, and as specified by the wording requirements of OAC Rule 3745-55-51. The value of the financial assurance mechanism must reflect at least the current amount of the closure cost estimate.

OHIO EPA DHWM
MAR 31 2004
During the life of the permit the facility may change the financial assurance mechanism as stated in OAC Rules 3745-55-43 and 3745-55-45. The facility must submit the financial assurance mechanism documentation to the Director of Ohio EPA in accordance with the parameters set forth in OAC Rules 3745-55-43 and 3745-55-45.

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

Section I of the permit application containing the financial assurance mechanism for closure must be updated to include a copy of the current liability coverage 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 3745-50-51.

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

(a) Unless otherwise specified by the hazardous waste rules, the Permittee must maintain at the facility, until closure is completed and certified by 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 3745-55-47, the following documents (including amendments, revisions and modifications):

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

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

(iii) closure plan, developed and maintained in accordance with OAC Rule 3745-55-12 and the terms and conditions of this permit;
(iv) cost estimate for facility closure, developed and maintained in accordance with OAC Rule 3745-55-42 and the terms and conditions of this permit;

(v) personnel training plan and the training records, developed and maintained in accordance with OAC Rule 3745-54-16 and the terms and conditions of this permit;

(vi) operating record, required by OAC Rule 3745-54-73 and the terms and conditions of this permit; and

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

(viii) Reserved

(ix) annually-adjusted cost estimate for facility closures required by OAC Rule 3745-55-42 and the terms and conditions of this permit.

(x) all other documents required by Module A, Permit Condition A.12, and Module IA, Permit Condition I(A).10.

(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.

(c) Corrective Action reports and records as required by Module E, Permit Condition E.5 of this permit. These reports and records must be maintained for at least 3 years after all Corrective Action Activities have been completed.

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); and 3745-54-73(B)(9) at least once every two years. The provisions of OAC Rules 3745-54-75(H), (I) and (J); and 3745-54-73(B)(9) must be satisfied annually.

(b) The Permittee must submit the Waste Minimization Report to Ohio EPA's Office of Pollution Prevention within one hundred eighty (180) days of the effective date of this permit, and must submit updates to this report biennially 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 hazardous waste from off-site sources (except where the Permittee is also the generator) during the life of the permit. This is a facility wide limitation and includes all units.

B.2 Reserved

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, 3745-218, and 3745-270 of the Administrative Code.

(b) The Permittee must follow the procedures described in the waste analysis plan found in Section C of the permit application and the terms and conditions of this permit.

(c) The Permittee must verify the analysis of each waste stream annually as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the Director. At a minimum, the Permittee must maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee must
inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this permit.

B.4 Security
OAC Rule 3745-54-14

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

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

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

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

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

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

(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 F of the permit application.

(b) The Permittee must provide electrical grounding for all containers and tanks, and transport vehicles during all operations involving the handling of ignitable or reactive wastes.

(c) The Permittee must prevent accidental ignition or reaction of ignitable or reactive wastes using methods appropriate to the facility.
(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.

B.8 Reserved

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

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

B.10 Testing and Maintenance of Equipment
OAC Rule 3745-54-33

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

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

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

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

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

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

(a) The Permittee must comply with the requirements of OAC Rule 3745-54-37 (A) by making a diligent effort to:
(i) make arrangements and familiarize all emergency response agencies which are likely to respond in an emergency with the location and layout of the facility, properties of hazardous waste managed at the facility and associated hazards, places where facility personnel will normally be working, entrances to and roads inside the facility, and possible evacuation routes as depicted and explained in Section G of the permit application;

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

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

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

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

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

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

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

(a) Any fire involving hazardous waste; or
(b) Any explosion involving hazardous waste; or

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

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

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

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

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

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

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

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

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

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

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

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

(b) The Permittee must, in accordance with OAC Rule 3745-54-53, submit a copy of the contingency plan to all local police departments, fire departments, hospitals and local emergency response teams that may be called upon to provide emergency services. The Permittee must notify such agencies and the local authorities, in writing of any significant changes to the plan which will impact their ability to respond to an emergency, within fifteen (15) days of the effective date of any amendments of, revisions to, or modifications to the contingency plan. For all other changes, notification in writing must be made annually.

(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 Emergency and Remedial Response.

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

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

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

The Permittee must comply with the requirements regarding emergency procedures set forth in OAC Rule 3745-54-56, Section G of the permit application and the terms and conditions of this permit.
B.21 Availability, Retention and Disposition of Records
OAC Rule 3745-54-74

All records shall be furnished by the Permittee upon request to, and made available at all reasonable times for inspection by, Ohio EPA, in accordance with OAC Rule 73745-54-74.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Should a change in the facility closure plan become necessary, the Permittee must amend the closure plan in accordance with OAC 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 Northeast 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
B.36  **Cost Estimate for Facility Closure**  
OAC Rule 3745-55-42

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

(b) The Permittee must adjust the closure cost estimate for inflation within 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**  
OAC Rules 3745-55-43 and 3745-55-45

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

B.38  **Liability Requirements**  
OAC Rule 3745-55-47

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

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

The Permittee must comply with requirements set forth in OAC Rule 3745-55-48 regarding the incapacity of owners, operators, guarantors or financial institutions.
B.40 General Requirements for Land Disposal Restrictions
OAC Chapter 3745-270

The Permittee must comply with all applicable regulations regarding land disposal prohibitions and restrictions as required by OAC Chapter 3745-270.
MODULE C - RESERVED
MODULE D - TANK STORAGE, TREATMENT, AND MANAGEMENT

D. MODULE HIGHLIGHTS

The tank system consists of 12 above-ground carbon steel tanks (W-1, W-6, W-7, W-11, W-12, W-13, W-14, W-15, W-31, W-32, W-33, and W-34) with a total capacity of 245,300 gallons. The ages of the individual tanks vary between 7 and 56 years (as of 2002). Two tanks, W-6 and W-7, are considered new tanks as they replaced existing tanks in 1995. The remaining 10 tanks are considered existing tanks which were installed and in operation prior to July 14, 1986.

All 12 tanks are provided with secondary containment systems. Tank W-1 has a total storage capacity of 4,800 gallons and has a secondary containment system capable of holding up to 8,617 gallons. Tanks W-6, W-7 W-11, W-12, W-13, W-14, W-15, W-31, W-32, W-33, and W-34 are located in a secondary containment system capable of containing 91,376 gallons. The largest tank in this secondary containment system has a capacity of 49,996 gallons. The secondary containment systems for the tanks are fully described in Section D of the permit application.

Tanks are assumed to contain ignitable wastes and, as such, are equipped with flame arresters which prevent ignition from an external source. Tanks W-1, W-6 and W-7 are provided with high level shutdowns that stop the pump and close the automatic valves which feed the tanks to prevent overfilling the tanks. The other nine above-ground storage tanks are equipped with high level alarms as a means of preventing overflows into the secondary containment system. A complete description of the feed systems, safety cutoffs, bypass systems and pressure controls is found in Section D of the permit application.

The tanks are used to manage hazardous wastes generated at the Lubrizol–Painesville facility as well as from three other Lubrizol facilities that are located in the following cities: Wickliffe, Ohio, Deer Park, Texas, and Bayport, Texas.

In general, the types of wastes that are managed in the system include the following: filter cakes, waste water, clarifier sludge, aqueous wastes, slurry pre-mixes, aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, and off-specification materials. The specific hazardous waste codes that encompass these wastes and those that the facility is permitted to store and treat in the tank system are listed in Permit Condition D.1(a).

Tank W-1 is used to blend filter cakes and clarifier sludges with aqueous wastes to form a pumpable slurry. Once blended, the slurries are pumped to tanks W-6 and W-7. Tanks

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W-6 and W-7 feed the slurried wastes to the incinerator. The remaining tanks (W-11, W-12, W-13, W-14, W-15, W-31, W-32, W-33, and W-34) are used to store and treat aqueous and non-aqueous wastes as explained in Section D of the permit application.

D.1 Tank Storage Quantity Limitation/Waste Identification

(a) The Permittee may store a total volume of 245,300 gallons of hazardous waste in 12 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:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>W-1</td>
<td>4,800</td>
<td>205 in X 138 in (conical vessel)</td>
<td>Yes – In place</td>
<td>Filter cakes, waste water, clarifier sludge, aqueous wastes, slurry pre-mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-6</td>
<td>6,400</td>
<td>116 in X 120 in</td>
<td>Yes – In place</td>
<td>slurry mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-7</td>
<td>6,400</td>
<td>116 in X 120 in</td>
<td>Yes – In place</td>
<td>slurry mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-11</td>
<td>11,200</td>
<td>186 in X 132 in</td>
<td>Yes – In place</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-12</td>
<td>24,000</td>
<td>366 in X 138 in</td>
<td>Yes – In place</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
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</tr>
<tr>
<td>W-13</td>
<td>26,000</td>
<td>366 in X 144 in</td>
<td>Yes – In place</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-14</td>
<td>20,000</td>
<td>366 in X 128 in</td>
<td>Yes – In place</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, water flushes solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-15</td>
<td>25,500</td>
<td>366 in X 143 in</td>
<td>Yes – In place</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-31</td>
<td>10,500</td>
<td>210 in X 120 in</td>
<td>Yes – In place</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-32</td>
<td>10,500</td>
<td>210 in X 120 in</td>
<td>Yes – In place</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-33</td>
<td>50,000</td>
<td>252 in X 240 in</td>
<td>Yes – In place</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-34</td>
<td>50,000</td>
<td>252 in X 240 in</td>
<td>Yes – In place</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
</tbody>
</table>

D.2 Limitations on Treatment of Hazardous Waste in Tanks

(a) The Permittee is authorized to treat 245,300 gallons per day of hazardous waste in the 12 tanks specified in the table below. The Permittee shall treat
in tanks only the hazardous waste codes specified in the permit application and summarized below:

<table>
<thead>
<tr>
<th>Tank No.</th>
<th>Capacity (Gallons)</th>
<th>Treatment Type</th>
<th>Dimensions of Tank</th>
<th>Secondary Containment Volume (Gal)</th>
<th>Description of Hazardous Waste</th>
<th>Hazardous Waste No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-1</td>
<td>4,800</td>
<td>blending</td>
<td>205 in X 138 in (conical vessel)</td>
<td>8,617 gallons</td>
<td>Filter cakes, waste water, clarifier sludge, aqueous wastes, slurry pre-mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-6</td>
<td>6,400</td>
<td>phase separation, blending</td>
<td>116 in X 120 in</td>
<td>91,376 gallons</td>
<td>slurry mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-7</td>
<td>6,400</td>
<td>phase separation, blending</td>
<td>116 in X 120 in</td>
<td>91,376 gallons</td>
<td>slurry mixes</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-11</td>
<td>11,200</td>
<td>phase separation, blending</td>
<td>186 in X 132 in</td>
<td>91,376 gallons</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-12</td>
<td>24,000</td>
<td>phase separation, blending</td>
<td>366 in X 138 in</td>
<td>91,376 gallons</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>Tank No.</td>
<td>Capacity (Gallons)</td>
<td>Treatment Type</td>
<td>Dimensions of Tank</td>
<td>Secondary Containment Volume (Gal)</td>
<td>Description of Hazardous Waste</td>
<td>Hazardous Waste No.</td>
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</tr>
<tr>
<td>W-13</td>
<td>26,000</td>
<td>phase separation, blending</td>
<td>366 in X 144 in</td>
<td>91,376 gallons</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-14</td>
<td>20,000</td>
<td>phase separation, blending</td>
<td>366 in X 126 in</td>
<td>91,376 gallons</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, water flushes solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-15</td>
<td>25,500</td>
<td>phase separation, blending</td>
<td>366 in X 143 in</td>
<td>91,376 gallons</td>
<td>Aqueous wastes, waste oil, oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-31</td>
<td>10,500</td>
<td>phase separation, blending</td>
<td>210 in X 120 in</td>
<td>91,376 gallons</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-32</td>
<td>10,500</td>
<td>phase separation, blending</td>
<td>210 in X 120 in</td>
<td>91,376 gallons</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>W-33</td>
<td>50,000</td>
<td>phase separation, blending</td>
<td>252 in X 240 in</td>
<td>91,376 gallons</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
<tr>
<td>Tank No.</td>
<td>Capacity (Gallons)</td>
<td>Treatment Type</td>
<td>Dimensions of Tank</td>
<td>Secondary Containment Volume (Gal)</td>
<td>Description of Hazardous Waste</td>
<td>Hazardous Waste No.</td>
</tr>
<tr>
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</tr>
<tr>
<td>W-34</td>
<td>50,000</td>
<td>phase separation, blending</td>
<td>252 in X 240 in</td>
<td>91,376 gallons</td>
<td>Oil, fuel oil, scrubber solutions, alcohols, reaction byproducts, distillates, solvents, off-specification materials</td>
<td>D001, D002, D003, D005, D018, D021, D023, D024, D025, D026, D027, D035, F003</td>
</tr>
</tbody>
</table>

(b) Permit 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 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 or components in accordance with Section D 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

(a) New Tank Systems

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 D of the permit application.

New tanks at the facility are W-6 and W-7.
(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.

Existing tanks at the facility are W-1, W-11, W-12, W-13, W-14, W-15, W-31, W-32, W-33, W-34.

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 F 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) Above-ground 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

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(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) Reserved

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

D.7 Response to Leaks or Spills
OAC Rule 3745-55-86

(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)(iv) 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.

(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 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.

(iv) 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) 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 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 I of the permit application.

(b) If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the closure plan, then the Permittee must close the tank system(s) and perform post-closure care following the contingent procedures in the closure plan and in the post-closure plan.

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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

Corrective Action Summary

On December 19, 2001, a RCRA Facility Assessment (RFA) for Lubrizol's Painesville, Ohio facility was submitted to Ohio EPA. The RFA was prepared by Baker Environmental, Inc. which is a consulting firm contracted by Lubrizol. The December 2001 RFA is an update of a RFA submitted to U.S. EPA Region 5 on March 1, 1988. The above referenced documents are incorporated into the Part B application. The 1988 and 2001 RFAs identified twelve (12) historic Waste Management Units (WMU1 through WMU12), fourteen (14) current Waste Management Units (WMU13 through WMU25A), and six (6) Areas of Concern (AOC26 through AOC31). Two additional AOCs (AOC32 and AOC33) were identified by Ohio EPA based on the agency's Spill Report Data Base.

Based upon the information in the RFA reports and a Visual Site Inspection (VSI) conducted by Ohio EPA DHWM, the following Waste Management Units were removed from further study (WMU9, WMU10, WMU12 through WMU23). These WMUs were either within secondary containment or were located in an enclosed building with a well maintained concrete floor.

Lubrizol conducted an extended RFA to collect sampling data in the remaining WMUs which were not eliminated from further study. The facility's RFA Work Plan was approved by Ohio EPA on October 27, 2004. Based on the results of the extended RFA which were submitted to Ohio EPA on May 23, 2005, Ohio EPA determined that a RCRA Facility Investigation (RFI) would be required.

Lubrizol conducted the RFI in two phases. During the first phase (RFI Work Plan approved December 23, 2005, report submitted May 19, 2006) Lubrizol established background levels for metals and performed an aquifer evaluation. In all, six monitoring wells were installed along the perimeter of the facility. Results from the aquifer evaluation determined that five of the six wells installed did not produce enough water to meet the classification of "Yield Significant Amounts of Water," which is 0.1 gallons per minute.

During the second phase of the RFI (RFI Work Plan approved December 1, 2006, report submitted April 13, 2007) Lubrizol conducted additional sampling in areas where sample results were above established screening levels. Ground water samples were also taken in the one well which met the definition of "Yield Significant Amounts of Water," 0.1 gallons per minute.
Ground water results for the RFI, with the exception of arsenic and chromium for the unfiltered portion of the sample, were below applicable standards (National Primary Drinking Water Regulation, National Secondary Drinking Water Regulation). Arsenic and chromium are naturally occurring elements that are not associated with activities conducted at the facility. For the above reasons, ground water was determined to not have been impacted by site activities. In addition, the aquifer underneath the facility is of poor quality. Residents in the Painesville area receive their drinking water from public water supplies drawing from Lake Erie.

RFA and RFI soil sample results for several WMU's were above standards considered safe for residential use. In all, four WMU's exceeded residential use standards. WMU's not meeting residential use standards are: WMU2, The Incinerator Lagoon; WMU5, Auxiliary Process Sewer Lagoon; WMU25, Soil Pile Area; and WMU25A, Temporary Gravel Storage Area. For WMU5, the Auxiliary Process Sewer Lagoon, there was one detected result for acetophenone, in only one of the four samples taken in the area. This is the only sample throughout the entire investigation that acetophenone was detected. Acetophenone is not a chemical associated with this waste management unit and the sample was collected at twelve feet below ground surface. Upon additional review, WMU5 was removed from further evaluation because it was determined the acetophenone result was a false positive.

For the three remaining WMU's, soil concentrations were above residential use standards, but, below industrial/commercial standards. The Permittee shall enter into an Environmental Covenant, limiting these areas to industrial/commercial use. The Environmental Covenant shall include the entire area for the portion of the facility south of Freedom Road, the industrial portion of the facility. An Environmental Covenant is a legally enforceable document that imposes activity and use limitations on a property. These use restrictions run with the property and are binding upon existing and any future property owner, should the property be sold. Ohio EPA will monitor the property owner's adherence to the use restriction to help ensure continued protection of human health and the environment.

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

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

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

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

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

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

Attachment 1 of this permit identifies the WMUs and AOCs.

E.4 Reserved

E.5 RCRA Facility Investigation (RFI)
OAC Rule 3745-55-011

In the event of a newly discovered unit, the Permittee must conduct an RFI to thoroughly evaluate the nature and extent of any release of hazardous waste(s) and hazardous constituent(s) from all applicable WWUs identified in 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, in case of a newly discovered waste management unit, on a timeframe 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 other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require (or the Permittee may propose) the development and implementation of an IM (this may include an IM Workplan) at any time during the life of the permit to mitigate or eliminate a threat to human health or the environment. The Permittee shall implement the IM upon a time frame established by Ohio EPA.

E.7 Determination of No Further Action

(a) Permit Modification

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

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

(b) Periodic Monitoring

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

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

E.8 **Corrective Measures Study (CMS)**

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

(a) **CMS Workplan**

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

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

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

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

(c) CMS Final Report

Within 60 days after the completion of the CMS, the Permittee must submit a CMS Final Report to Ohio EPA. The CMS Final Report must summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative.

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

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

E.9 Corrective Measures Implementation (CMI)

The Corrective Measure selected for implementation must: (1) be protective of human health and the environment; and as applicable (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 considered as applicable 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.

In authorizing the proposed Corrective Measures, Ohio EPA may also consider such other factors as may be presented by site-specific conditions.
The Permittee must implement corrective measures as described below.

(a) The portion of the facility south of Freeman Road must be limited to industrial use. The permittee shall enter into an Environmental Covenant restricting the portion of property south of Freedom Road to industrial use.

**Industrial land use limitations.** The Property shall not be used for residential, commercial (other than those associated with and incidental to industrial operations) or agricultural activities, but may be used for certain industrial activities. The term “residential activities” shall include, but not be limited to, the following:

(i) Single and multi-family dwelling and rental units;
(ii) Day care centers and preschools;
(iii) Hotels and motels;
(iv) Educational (except as a part of industrial activities within the Property) and religious facilities;
(v) Restaurants and other food and beverage services (except as a part of industrial activities within the Property);
(vi) Entertainment and recreational facilities (except as a part of industrial activities within the Property);
(vii) Hospitals and other extended care medical facilities (except as a part of industrial activities within the Property); and
(viii) Transient or other residential facilities.

The term “industrial activities” shall include manufacturing, processing operations and office and warehouse use, including but not limited to production, storage and parking/Driveway use. Because of health concerns specific to airborne beryllium dust, no digging or excavation will be permitted in the area of WMU 1 unless authorized via an excavation plan reviewed and approved by Ohio EPA.

(b) The Permittee must remove the six monitoring wells that were installed during the RCRA Facility Investigation (RFI). The Permittee shall submit within ninety (90) days of issuance of this Permit Modification a Well Abandonment Plan to the Ohio EPA DHWM Northeast District Office for approval. The permittee will have one-hundred and twenty (120) days to abandon the six wells after approval of the Well Abandonment Plan by Ohio EPA.
(c) **Financial Assurance**  
OAC Rule 3745-54-101

Within thirty (30) days of the issuance of this Permit Modification, 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; and

(v) Specification of all waste(s) that have been managed at the unit.

(b) **Release Information**

The Permittee must submit to Ohio EPA, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing WMU.

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

If Ohio EPA determines that a RCRA Facility Investigation is required for newly identified WMUs, the Permittee must submit a written RCRA Facility Investigation 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 Documents Requiring Professional Engineer Stamp
ORC 4733.01

Preparation of the following Corrective Action documents constitutes the "practice of engineering" as defined by ORC 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.
Pages 47-62 are blank due to modification of Permit Terms & Conditions
The Waste Heat Recovery Incinerator (WHRI) system consists of a rotary hearth incinerator with a secondary combustion chamber. A waste heat boiler is used to recover heat from flue gases and generate steam. Flue gases from the waste heat boiler are routed to a baghouse for particulate removal and a wet scrubber for acid gas removal.

The rotary hearth incinerator processes both liquid and solid waste streams. Waste streams include waste oil (recovered organics), aqueous liquids, distillate liquids, slurries, and containerized wastes. These waste streams are fed by burners, atomized liquid nozzles, a slurry nozzle, and a drop chute.

The rotary hearth incinerator (primary combustion chamber) has a refractory table in the bottom portion of the incineration chamber that rotates while the sidewalls and top of the chamber remain stationary. Solids placed on the rotating table are agitated by stationary rabble arms and moved slowly to the outer diameter of the rotary hearth where they are discharged after a retention time of approximately 30 minutes. Solids are discharged from the rotating hearth into a collection hopper below the hearth. A drag conveyor then transfers the ash to an enclosed receptacle.

Flue gases generated in the rotary hearth incinerator flow into the secondary combustion chamber (SCC). The primary function of the SCC is to elevate the flue gas temperature for an additional time period to complete the combustion process. The SCC is equipped with a single liquid burner, which uses either fuel oil or liquid waste (recovered organic) as fuel. From the SCC the flue gas enters the heat recovery boiler. The boiler has a flue gas outlet temperature of approximately 650 deg F. A feed water economizer is used to preheat the boiler feed water and further reduces flue gas temperature. At the exit of the feed water economizer is the post economizer cooler. The post economizer cooler uses a water spray to further cool combustion gases, prior to their entering the baghouse. An induced draft (ID) fan located between the baghouse and scrubber is used to maintain negative pressure on the rotary hearth and to increase or decrease gas flow through the system. The first stage of the wet scrubber is the quench chamber, which further reduces the gas stream temperature before it enters the packed column. The wet scrubber is the final flue gas cleaning unit in the incinerator system. It removes acid gas pollutants and fine particulate matter. The stack is the last unit in the system. The height of the stack is 110 feet.
Analyzers are positioned at specific locations within the incineration system to monitor combustion of the hazardous waste and ensure compliance with permit limits.

A programmable logic controller (PLC) provides control functions, alarming, data logging, trending, graphics, and operator interaction with the incineration system. The majority of the PLC system is located in the WHRI control room. Process parameters in critical locations are continuously recorded by the PLC and monitored by the facility’s control room operators. The PLC is used to maintain key operating conditions such as combustion zone temperature and process flow within permitted ranges. The PLC will automatically stop waste feeds if certain process and operation parameters fall outside the allowable operating range.

Key operating parameters for the incineration system include:

(i) combustion temperature for the rotary hearth (minimum) and the SCC (minimum);
(ii) waste feed restrictions;
(iii) residence time for waste in combustion zone, to ensure complete combustion;
(iv) negative pressure in the rotary hearth to prevent fugitive emissions;
(v) carbon monoxide concentration in the stack gases, as an indicator of complete combustion;
(vi) baghouse inlet temperature, as a control for dioxin/furan formation; and
(vii) scrubber liquid to gas (L/G) ratio and scrubber liquid pH, as an indicator of scrubber effectiveness.

Lubrizol-Painesville has demonstrated compliance with the maximum achievable control technology (MACT) requirements of 40 CFR Part 63, subpart EEE by conducting a Comprehensive Performance Test and submitting to the director a Notification of Compliance under 40 CFR sections 63.1207(j) and 63.1210(d), documenting compliance with the requirements of 40 CFR Part 63, subpart EEE. Lubrizol-Painesville received a finding of compliance from Ohio EPA Division of Air Pollution Control dated April 25, 2005.
I(A).2 Identification Criteria for Permitted and Prohibited Waste
OAC Rule 3745-57-44

Unless otherwise authorized, the Permittee may incinerate the following hazardous wastes, as specified in this Permit and only under the terms of this Permit. The Permittee may only feed the hazardous wastes as identified below at the facility subject to Permit Conditions I(A).3. through I(A).5., and I(A).8.

(a) The Permittee may incinerate the following hazardous wastes:

- Waste Oil (Recovered Organic)
- Aqueous Liquids
- Distillate Liquids
- Slurries, and
- Containerized Wastes

(b) RESERVED

(c) The Permittee shall not feed any hazardous waste whose current Ohio EPA hazardous waste code number does not appear in the Part A application under the process code of T03.

I(A).3 RESERVED
I(A).4 RESERVED
I(A).5 RESERVED
I(A).6 RESERVED
I(A).7 Closure
OAC Rule 3745-57-51

The Permittee shall follow the procedures in the Closure Plan in Section I of the permit application, and the terms and conditions of this permit.
I(A).8 RESERVED

I(A).9 Treatment Residual

Unless the Permittee can show otherwise, per OAC Rule 3745-51-03(D), residue from the incinerator is hazardous waste and the Permittee is considered the generator.

(i) The Permittee shall sample and analyze the treatment residue generated from the incineration system and all ancillary systems in accordance with the procedures outlined in Section C of the permit application.

(ii) The Permittee shall manage the treatment residue generated from the incineration system in accordance with the procedures outlined in Section D of the permit application and all applicable Ohio hazardous waste regulations.

I(A).10 Compliance Schedule

In June, 2002, the Permittee submitted the “Comprehensive Performance Test Plan to Demonstrate Compliance with 40 CFR, Subpart EEE”. This test plan includes a risk condition to collect emission data for site specific human health and ecological risk assessments.

In October, 2003 the Permittee conducted the Risk Burn Test (RBT) in conjunction with the Comprehensive Performance Test (CPT) as required by HWC MACT regulations. The RBT report was submitted in April, 2004.

Within one year after completion of the Ohio EPA's review of the first RBT report, the Permittee shall complete a site specific risk assessment and submit this assessment to Ohio EPA. Within 60-days of receipt of Ohio EPA's comments, the Permittee must submit either an amended or new site specific risk assessment that incorporates Ohio EPA's comments.

End of Permit Conditions
<table>
<thead>
<tr>
<th>Unit</th>
<th>Materials Stored</th>
<th>Description</th>
<th>Additional Sampling</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMU-1 Beryllium Disposal Area</td>
<td>Beryllium contaminated materials including rubber linings, cast iron pipe, flexible rubber hose, stainless steel drip pan trays, two 100 gallon tanks, deck plating, beryllium ingots</td>
<td>Disposal area was a trench measuring approximately 20' wide x 60' long x 20' deep. Trench was compacted then filled in with gravel and fill dirt. Building 18 currently is on top of the unit.</td>
<td>18 samples were taken and analyzed for beryllium. Sample values were above OEPA DHWM Generic Residential Standards but below VAP Industrial/Commercial Standards.</td>
<td>Facility will enter into an Environmental Covenant limiting the area to Industrial/Commercial use.</td>
</tr>
<tr>
<td>WMU-2 Incinerator Lagoon</td>
<td>Storm sewer water, process sewer water, boiler blowdown, incinerator flyash, incinerator wall wash down, gas well brines, sewer clarifier sludge, sodium aluminate, neutralized phenolic spills, spill residues</td>
<td>Received waste between 1972 and 1985. Lagoon was approximately 150' long x 55' wide x 12' deep. The material was solidified and stabilized. Approximately 1,750 cubic yards of material was removed and sent to a public landfill. The lagoon was backfilled with clean soil. The unit is currently a grassy area.</td>
<td>4 samples were taken and analyzed for volatiles, semivolatiles and metals. Several sample values were above OEPA DHWM Generic Residential Standards but below VAP Industrial/Commercial Standards.</td>
<td>Facility will enter into an Environmental Covenant limiting the area to Industrial/Commercial use.</td>
</tr>
<tr>
<td>WMU-3 Maintenance Lagoon</td>
<td>Sodium aluminate solution, sewer sludge, neutralized phenolic spills, spill residue, toluene spill residue, neutralized sulfide reactive sewer sludge, rainwater</td>
<td>Receive waste from 1981 to 1985. Lagoon was approximately 200' long x 60' wide x 8' deep. Materials in lagoon were solidified using klin dust and portland cement, and sent off as non-hazardous waste. Area was backfilled and two equalization tanks were installed over the unit.</td>
<td>3 samples were taken and analyzed for volatiles, semivolatiles and metals. All samples were below OEPA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
</tr>
<tr>
<td>WMU-4 Process Sewer Lagoon</td>
<td>Process wastewater containing toxic materials, gravel contaminated with organics, effluent sludge</td>
<td>Received waste from 1967 to 1986. Lagoon was approximately 200' long x 50' wide x 14' deep. Sludge was removed in 1986 and disposed off-site as non-hazardous waste. Lagoon was then backfilled with clean soil and seeded with grass. Currently area is partially covered with gravel and a concrete pad. Roll-off boxes are stored on the pad filled with various solids including contaminated gravel.</td>
<td>4 samples were taken and analyzed for volatiles, semivolatiles and metals. All samples were below OEPA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
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<td>Module E</td>
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<tr>
<td>WMU-5</td>
<td>Process wastewater containing toxic materials, gravel contaminated with organics, effluent sludge</td>
<td>Unit was taken out of service in 1985. Lagoon was approximately 185' long x 45' wide x 12' deep. Material was removed and backfilled with clean soil, then seeded with grass. Currently, the area is partially covered with gravel and partially covered with a concrete pad which is used as a Roll-off Storage Area.</td>
<td>3 samples were taken and analyzed for volatiles, semivolatiles and metals. All samples were below OPEA DHWM Generic Residential Standards with the exception of Acetophenone which is not a chemical associated with this unit and determined to be a false positive.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
</tr>
<tr>
<td>WMU-6 Ash Pit</td>
<td>Ash and clinkers, gravel contaminated with organics</td>
<td>Received material from 1972 till 1980. Pit was approximately 60' long x 50' wide. The depth was unknown. The pit was backfilled with clean soil. The area is currently paved with concrete and the pretreatment system is located on top of the former pit.</td>
<td>2 samples were taken and analyzed for volatiles, semivatiles and metals. All samples were below OPEA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
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<tr>
<td>WMU-7 Landfarming Area</td>
<td>Storm sewer water, process sewer water, boiler blowdown, incinerator flyash, incinerator wall wash down, gas well brines, sewer clarifier sludge, sodium aluminate, neutralized phenolic spills, spill residues, gravel contaminated with organics, effluent sludge, process wastewater containing toxic materials.</td>
<td>The area is approximately 1 acre in size. Sludge was spread and dried here from 1980 till 1985. The area was cleared and part of the material in the unit was used to build a dike. The remainder was placed on an existing dirt pile located north of the process lagoons.</td>
<td>5 samples were taken and analyzed for volatiles, semivatiles and metals. All samples were below OPEA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
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<tr>
<td>WMU-8 Soil Pile</td>
<td>Dried sludge from the Process Sewer Lagoon, process wastewater containing toxic materials, gravel contaminated with organics, effluent sludge</td>
<td>An open, unlined dirt area approximately 70 feet square. Currently, the area is an unused, open grass area.</td>
<td>2 samples were taken and analyzed for volatiles, semivatiles and metals. All samples were below OPEA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
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<td><strong>WMU-9 Less than 90 Day Drum Storage Area</strong></td>
<td>Mercury contaminated waste materials, Spent trichloroethylene, 1,1,1-trichloroethane, methylene chloride, asbestos stored in lined cardboard drums, acetylene tetrabromide</td>
<td>Unit is located in Building 17 and a concrete covered pad adjacent to Building 17. A 4 inch high concrete secondary containment curb surrounds Building 17. The floor for Building 17 is constructed of 4 to 6 inch thick concrete with no drain. Currently, Building 17 is empty and not used for any purpose. There is no surrounding curb around the adjacent area and the thickness of the concrete is unknown. This area is also currently empty.</td>
<td>Part of Unit is inside a building. There is also secondary containment throughout the unit. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU.</td>
<td>Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection.</td>
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<tr>
<td><strong>WMU-10 Filter Cake Hopper Storage Area</strong></td>
<td>Barium filter cake</td>
<td>Filter cake was stored in typical 4-yard capacity hoppers. Material was temporarily stored in process from the manufacturing process buildings where they were created, to the incinerator where they were destroyed. Currently, the area is not being used.</td>
<td>Material is stored in hoppers. Most of the moisture has been removed as part of the filter cake operation. Ohio EPA did not request any sampling for this WMU.</td>
<td>Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection.</td>
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<tr>
<td><strong>WMU-11 Building 34 Drum Storage Area</strong></td>
<td>Unknown</td>
<td>Drums were reportedly stored south of Building 34. It is unknown how long this area was used; however, this practice was discontinued in 1984. The area is paved. There was no secondary containment.</td>
<td>2 samples were taken and analyzed for volatiles, semivolatiles and metals. All samples were below OEEA DHWM Generic Residential Standards.</td>
<td>Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels.</td>
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<tr>
<td><strong>WMU-12 Underground Storage Tank</strong></td>
<td>D001 characteristic waste generated by the laboratory</td>
<td>Unit consisted of a 2,500 gallon underground tank made of 1/4&quot; carbon steel. Tank was coated for corrosion protection and was equipped with two sacrificial anodes. In 1985 and 1986 the tank was pressure tested and on both occasions showed no sign of leaking. The tank was taken out of service</td>
<td>Material was stored within a tank. Tank has been pulled and is no longer in service. A visual site inspection conducted in the area by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU.</td>
<td>Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection.</td>
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| WMU-13 Above ground Waste Tank System | Waste from facility manufacturing operations, filter cake, organic wastes, aqueous waste, sludges | Unit consists of 12 above ground hazardous waste tanks. All tanks are made of a reinforced sealed concrete secondary containment system. Expansion joints and water stops are used at all joints. Tank integrity assessments are performed annually. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-14 Above ground Less than 90 Day Storage Tank 31 | Process line flushes, drip pan contents from loading lines, lubricating additives, solvents, alcohol, D001, D002, D003, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene | Tank is located on a concrete pad. The area surrounding the pad is covered with track pans before reaching gravel. Tank system consists of one 3,000 gallon, double wall with secondary containment using the outer shell to contain any leaks from the inner shell, horizontal steel tank. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-15 Above ground Less than 90 Day Storage Tank 102 | Recovered organic material, D001, D002, D003, D005, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene | Unit consists of one 4,188 gallon vertical above ground tank. Secondary containment consists of a concrete base and 4.7 feet high steel dike walls. The capacity of the containment area is sufficient to handle the tank capacity and precipitation from a 25-year, 24-hour rainfall event. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-16 Above ground Less than 90 Day Storage Tank 130 | Organic materials from building reactors, D001, D002, D003, D005, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene | Unit consists of one 6,600 gallon, double wall, above ground carbon steel tank. The tank is equipped with secondary containment utilizing the outer shell to contain any releases from the inner shell. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-17 Above ground Less than 90 Day Storage Tank E-75 | Unit collects material from the drum washer, auto packer console, collection pans, and area vessels, D001, D002, D003, D005, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene | Unit consists of one 6,600 gallon, double wall, above ground carbon steel tank. The tank is equipped with secondary containment utilizing the outer shell to contain any releases from the inner shell. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-18 Above ground Less than 90 Day Storage Tank J-15 | Unit collects organic material from Building 20 and 21 vessels and the 400 Ballhouse, D001, D002, D003, D005, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene. | Unit consists of one 6,600 gallon, double wall, above ground carbon steel tank. The tank is equipped with secondary containment utilizing the outer shell to contain any releases from the inner shell. | Tank has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-19 Incinerator | Organic liquid wastes, slurry from solid and aqueous and/or organic wastes, phase separated aqueous wastes, distillates, personal protective equipment, lab waste, filter cake, D001, D002, D003, D005, F003. | Unit is paved with concrete. Unit is inspected daily checking for any leaks, spills, or fugitive emissions. Unit has an emergency waste feed cut-off system that is tested monthly. There is diking around the immediate area. | Unit is paved and inspected daily. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-20 Wastewater Pretreatment Facility | Process wastewater, tank farm drainings, boiler and cooling tower blowdown, steam condensate, aqueous streams from all areas of the plant. | Unit is designed to contain releases resulting from uncontrolled spills, leaks or overflows. Releases from non-contained areas above ground or run-off enter a storm drain or reenter the process sewer system. | Unit is designed to contain releases. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-21 Less than 90 Day Central Storage Area | Process filter cake, barium filter cake, contaminated filter cloths | Area is approximately 120' long x 50' wide and is surrounded by a 12" high concrete curb on three sides for secondary containment. The fourth side is contained by a concrete hump that is raised. The floor is constructed of 8" concrete. | Unit has a secondary containment system. A visual site inspection conducted by Ohio EPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
| WMU-22 Roll-off Storage Area | Contaminated gravel and filter cakes, semi-solid crystallized sulfur waste | Unit lies over the former process sewer lagoon and auxiliary process sewer lagoon. The unit consists of a 110' x 30' concrete pad with sealed concrete joints. | Sampling was conducted in both the process sewer lagoon and auxiliary process sewer lagoon, which are underneath this unit. All sample results for both units were below OPEA DHWM Generic Residential Standards. | Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |
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| WMU-23  |
| QA Laboratory waste, D001, D002, D003, D005, D018, D023, D024, D025, D026, D027, D035, F003 spent xylene |
| Waste is stored in portable tote containers 36 inches in diameter and 4 feet long. The containers are stored on a concrete pad with a concrete curb on three sides. Building 61 is on the fourth side. |
| Material is stored in totes with secondary containment. A visual site inspection conducted by OEPA did not notice any signs that there has been a release. Ohio EPA did not request any sampling for this WMU. |
| Unit removed from further consideration based on information in the RFA reports and a Visual Site Inspection. |

| WMU-24  |
| Waste Transfer and Collection Areas |
| Waste from facility manufacturing operations, filter cake, organic wastes, aqueous waste, sludges |
| Area consists of sumps and pans lying between the tracks of rail lines. Track sumps are constructed of 4 inch minimum thick concrete and range from 4 to 7 feet long and wide and approximately 6 feet deep. |
| 14 samples were taken and analyzed for volatiles, semivolatiles and metals. All samples were below OEPA DHWM Generic Residential Standards. |
| Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels. |

| WMU-25  |
| Soil Pile Area |
| Dirt and gravel scrapings from spills, sludge periodically excavated from the creek at the storm sewer outfall, excavations from underground line repairs, drainage ditch dredging, organic contaminants |
| The soil pile area is approximately 250' long by 100' wide. The unit is next to a partially grassy open, unlined area. |
| 15 samples were taken and analyzed for volatiles, semivolatiles and metals. Several sample values were above OEPA DHWM Generic Residential Standards but below VAP Industrial/Commercial Standards. |
| Facility will enter into an Environmental Covenant limiting the area to Industrial/Commercial use. |

| WMU-25A  |
| Temporary Gravel Storage Area |
| Gravel and dirt contaminated with organics |
| An open area approximately 100' by 75'. A sand dike surrounds the area and it is lined with plastic. The area has been dug up and removed. The facility has stopped this practice and currently stores contaminated soil and gravel in roll-off boxes until proper evaluation and final disposal. |
| 2 samples were taken and analyzed for volatiles, semivolatiles and metals. Several sample values were above OEPA DHWM Generic Residential Standards but below VAP Industrial/Commercial Standards. |
| Facility will enter into an Environmental Covenant limiting the area to Industrial/Commercial use. |

| AOC-26  |
| Xylene Release 2000 |
| xylene |
| On March 23, 2000 a container of recovered xylene was placed next to Building 12. On March 25, 2000 it was observed leaking. An estimated 569 pounds of xylene was released, covering an area of approximately 53 square feet. Some of the material was recovered; however, some was lost due to evaporation and flowing through joints in the concrete. |
| 2 samples were taken and analyzed for xylene. All samples were below OEPA DHWM Generic Residential Standards. |
| Unit removed from further consideration based on sample results from the Extended RFA soil analysis being below established screening levels. |

**OHIO EPA DHWM**

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<tbody>
<tr>
<td><strong>AOC-27</strong>&lt;br&gt;Hydroxyalkylamine Substituted Phenol Release 1996</td>
<td><strong>Volatiles</strong>&lt;br&gt;On September 13, 1996 approximately 7,600 pounds of hydroxyalkylamine substituted phenol was released through a drain valve on Tank 432 which was inadvertently left open after maintenance. As part of the cleanup, approximately 200 cubic yards of contaminated material was removed.&lt;br&gt;4 samples were taken and analyzed for ethylbenzene and xylene. 2 additional samples were analyzed for volatiles. All sample values were below OEPÆA Generic Residential Standards.</td>
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<tr>
<td><strong>AOC-28</strong>&lt;br&gt;Carbon Disulfide Release 1996</td>
<td><strong>Carbon Disulfide</strong>&lt;br&gt;On May 22, 1996 approximately 123 gallons of carbon disulfide was spilled along a railcar spur. The spill migrated to soils along the railroad track through a drain. The contaminated area was identified through soil sampling and approximately 5 cubic yards of material was removed.&lt;br&gt;2 samples were taken and analyzed for carbon disulfide. All samples were below OEPÆA DHWM Generic Residential Standards.</td>
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<tr>
<td><strong>AOC-29</strong>&lt;br&gt;Benzene Release 1996</td>
<td><strong>Volatile, Benzene</strong>&lt;br&gt;On August 9, 1991 approximately 100 pounds of organic material containing benzene was released to the storm sewer. A facility fire water line broke causing the flooding of a waste sump at the incinerator, and solid waste overflowed the pit. Approximately 100 cubic yards of contaminated gravel and dirt was recovered and disposed.&lt;br&gt;4 samples were taken and analyzed for volatiles, semivolatiles and barium. All samples were below OEPÆA DHWM Generic Residential Standards.</td>
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<tr>
<td><strong>AOC-30</strong>&lt;br&gt;Xylene Release 1991</td>
<td><strong>Volatile, Xylene, Ethylbenzene</strong>&lt;br&gt;On August 15, 1991 approximately 3,000 gallons of xylene and ethylbenzene product mixture spilled from Tank 232. The spill was contained within the secondary containment system until recovery. Pumpable product was recovered and the gravel around the spill area was high pressure washed.&lt;br&gt;Spill occurred in secondary containment and was cleaned up. Ohio EPA conducted a visual site inspection and did not notice any signs that there had been a release. OEPÆA did not require the facility to conduct any further sampling.</td>
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<tr>
<td>AOC-31</td>
<td>Semivolatiles, Phenol</td>
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<tr>
<td>Phenol</td>
<td>On March 29, 1985 approximately 55 pounds</td>
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<td>Release</td>
<td>of phenolic waste was released to the storm</td>
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<td>1985</td>
<td>and process sewers after a rupture in Tank</td>
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<td>448. Material spread across the road and</td>
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<td>over a field/wooded area. Details of the</td>
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<td>cleanup were not documented.</td>
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<td>3 samples were taken and analyzed for</td>
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<td>Phenol. All samples were below OEPA DHWM</td>
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<td>based on sample results from the Extended</td>
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<td>RFA soil analysis being below established</td>
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<tr>
<td>AOC-32</td>
<td>Diesel Fuel</td>
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<tr>
<td>Diesel</td>
<td>In April of 2001, approximately 1,500</td>
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<td>Fuel</td>
<td>gallons of diesel fuel was reported</td>
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<td>Release</td>
<td>spilled from a saddle tank from an on-site</td>
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<td>April</td>
<td>locomotive.</td>
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<td>2001</td>
<td>2 samples were taken and analyzed for</td>
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<td>benzene, ethylbenzene, toluene, xylene and</td>
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<td>semivolatiles associated with the</td>
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<td>spilled product. All sample results</td>
</tr>
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<td>were below DHWM Generic Residential</td>
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<td>Standards.</td>
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<td>Unit removed from further consideration</td>
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<td>based on sample results from the Extended</td>
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<td>RFA soil analysis being below established</td>
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<td>screening levels.</td>
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<td>AOC-33</td>
<td>Ethylene Glycol</td>
</tr>
<tr>
<td>Ethyl</td>
<td>In April of 1992, approximately 490</td>
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<td>Glycol</td>
<td>pounds of ethylene glycol was reported</td>
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<td>Release</td>
<td>to have bypassed the treatment system.</td>
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<tr>
<td>April</td>
<td>The release occurred within a concrete</td>
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<td>1992</td>
<td>diked area and drained to the facility's</td>
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<td>waste water treatment system.</td>
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<td>The spill was contained within the waste</td>
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<td>water treatment system. OEPA conducted a</td>
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<td></td>
<td>visual site inspection and did not notice</td>
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<td>any signs that there was a release in this</td>
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<td>area. OEPA did not request any sampling</td>
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<td>for this AOC.</td>
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<td>Unit removed from further consideration</td>
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<td>based on information in the RFA reports</td>
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<td>and a Visual Site Inspection.</td>
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