

**CERTIFIED MAIL**

September 27, 2013

Mr. James N. Larson  
Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044

**Re: Hazardous Waste Draft Renewal Permit  
Ohio EPA ID Number: OHD 048 415 665**

Dear Mr. Larson:

The Ohio EPA has reviewed your hazardous waste facility installation and operation permit (Permit) renewal application. It is the recommendation of the staff that the director issue a draft renewal Permit to Ross Incineration Services, Inc., since the permit appear to comply with applicable hazardous waste rules. Therefore, I have enclosed a draft renewal Permit in Accordance with Rule 3745-50-40 of the Ohio Administrative Code.

A public notice concerning the issuance of the Permit will appear in The Morning Journal newspaper on September 30, 2013. Ohio EPA will accept written comments relevant to the Permit until November 22, 2013. Written comments and/or requests to hold a public meeting should be submitted before the close of the public comment period on November 22, 2013, to Ohio EPA, Division of Materials and Waste Management, Authorizing Actions and Engineering Unit, P.O. Box 1049, Columbus, Ohio 43216-1049, Tel: (614) 644-2621.

You may review a copy of the draft renewal Permit at:

Grafton-Midview Public Library  
983 Main Street  
Grafton, Ohio 44044  
(440) 926-3317

Copies of the Permit application and the draft Permit are available for review at the following locations:

Mr. James N. Larson  
Ross Incineration Services, Inc.  
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Ohio EPA, Northeast District Office  
2110 E. Aurora Rd.  
Twinsburg, OH 44087  
(330) 963-1200

Ohio EPA Central Office  
DMWM  
50 W. Town Street, Suite 700  
Columbus, OH 43215  
(614) 644-2621

After carefully considering public comments, Ohio EPA will reconsider the draft renewal Permit and should issue or deny the final Permit.

If you have any questions, please contact Neil Wasilk of Ohio EPA's Northeast District Office at (330) 963-1200.

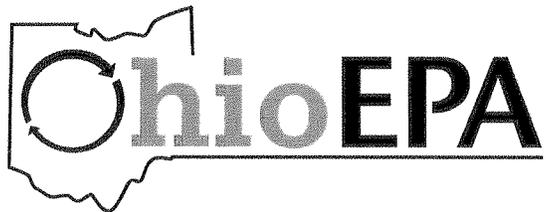
Sincerely,



Georgia Frakes, Management Analyst  
Division of Materials and Waste Management

Enclosure

ec: John Nyers, DMWM, CO  
Scott Hester, DMWM, CO  
Ruthanne Flottman, DMWM, CO  
Ed Lim, DERR, CO  
Todd Anderson, Legal  
Heidi Grismer, PIC  
Neil Wasilk, DMWM, NEDO  
John Paquelet, DMWM, NEDO  
John Palmer, DERR, NEDO  
Nyall McKenna, DMWM, NEDO  
Jae Lee, U.S. EPA, Region 5



September 2013

## Draft Hazardous Waste Permit Renewal

**Facility Name:** Ross Incineration Services, Inc.

**U.S. EPA I.D.:** OHD 048 415 665

**Location:**

36790 Giles Road  
Grafton, Ohio 44044

**Facility Owner:**

Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, Ohio 44044

Ross Consolidated Corp.  
36790 Giles Road  
Grafton, Ohio 44044

**Facility Operator:**

Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, Ohio 44044

**Activity:**

Permit renewal for tank and container storage of hazardous waste; treatment of hazardous waste by incineration and in tanks and a filter press; Corrective Action.

**Comment Period:**

September 30, 2013 – November 22, 2013

**Submit Comments to:**

Ohio EPA  
Mr. John Nyers  
Division of Materials and Waste Management  
P.O. Box 1049  
Columbus, Ohio 43216-1049  
[John.Nyers@epa.ohio.gov](mailto:John.Nyers@epa.ohio.gov)

U.S. EPA, Region 5  
Mr. Jae Lee  
RCRA Branch (LR-8J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
[Lee.Jae@epa.gov](mailto:Lee.Jae@epa.gov)

### What is the history of the hazardous waste program?

The Resource Conservation and Recovery Act (RCRA) is a federal law enacted in 1976 to address the growing volume of municipal and industrial solid waste generated across the United States. Goals established by RCRA include: protection of human health and the environment from potential hazards of waste disposal, reducing the amount of waste generated, and ensuring that waste is managed in an environmentally sound manner.

Congress' intent was for the states to assume primary responsibility for implementing the hazardous waste regulations with oversight from the United States Environmental Protection Agency (U.S. EPA). U.S. EPA must approve each state as an authorized state. To become an authorized state, the state must demonstrate that its program is at least equivalent to and consistent with federal laws, provides adequate enforcement authority and provides availability of information similar to the federal program. Since 1989, the State of Ohio has been an authorized state by U.S. EPA for the majority of the hazardous waste program.

Currently, the State of Ohio is not authorized by U.S. EPA to issue a permit for organic air emissions (40 CFR Part 264, Subparts BB and CC) from hazardous waste storage units. U.S. EPA has drafted a RCRA permit to address organic air emissions from hazardous waste storage units. U.S. EPA's draft permit and the State of Ohio's draft permit have been issued concurrently and both share the same comment period.

# Draft Hazardous Waste Permit Renewal

## How can I become more involved?

A public meeting will be held to receive comments on Thursday, November 21, 2013 at 6 p.m. at the Grafton-Midview Public Library, 983 W. Main Street, Grafton, OH 44044. Oral comments will be received during the public meeting. All persons, including the applicant, may submit written comments relating to this draft action. Written comments may be submitted before the end of the comment period to the address in the box on the left.

The comment period begins on September 30, 2013 and ends on November 22, 2013. A copy of the permit application and the draft permit is available for review by the public at the following locations:

Ohio EPA, Northeast District Office  
2110 East Aurora Road  
Twinsburg, Ohio 44087  
(330) 963-1200

Ohio EPA, Central Office  
Division of Materials and Waste Management  
Lazarus Government Center  
50 West Town St., Suite 700  
Columbus, Ohio 43215  
(614) 644-2621

A copy of the Ohio draft permit and the federal draft permit is available for review by the public at:

Grafton-Midview Public Library  
983 Main Street  
Grafton, Ohio 44044  
(440) 926-3317

A copy of the draft permit is available for review by the public online at the following locations:

The Ohio draft permit is available for review by the public online under the "Stakeholder Input" tab at: [epa.ohio.gov/dmwm/](http://epa.ohio.gov/dmwm/).

The federal draft permit is available for review by the public at: [epa.gov/region5/waste/permits/actions.htm](http://epa.gov/region5/waste/permits/actions.htm).

Within sixty (60) days of the close of the public comment period, Ohio EPA will, without prior hearing, issue the permit (or deny the request) in accordance with Chapter 3734 of the Ohio Revised Code (ORC). If Ohio EPA approves the application, taking into account public comments, a renewal permit will be issued with terms and conditions as are necessary to ensure compliance with hazardous waste rules.

## What does the facility do?

The facility receives hazardous waste generated by others. The facility includes units that: incinerate hazardous waste, store hazardous waste in containers and tanks and treat wastes in tanks and in a filter press. Also located at the facility are a surface impoundment that was closed with waste in-place and additional post-RCRA waste management units that were closed with waste removal. Four solid waste management unit areas located at the facility include units that conducted waste management activities prior to the RCRA regulatory program.

Typical hazardous waste types received at the facility include: halogenated and non-halogenated spent solvents, paint wastes, off specification commercial chemical products and spill residues. Waste generated at the facility consists primarily of treatment residuals from the incineration process.

## What would this hazardous waste permit allow the facility to do?

This draft permit would allow Ross Incineration Services, Inc. to continue to conduct the following activities:

- Store 610,373 gallons of hazardous waste in the permitted container areas: Container Storage Facility, Bulk Storage Areas, and Oxidizer Storage Building;

- Store 1,122,216 gallons of hazardous waste in 49 tanks;

- Treat 122,000 gallons per day of hazardous waste in 4 tanks;

## **Draft Hazardous Waste Permit Renewal**

-Process 111,000 gallons per day of scrubber water in the filter press; and,

-Operate a hazardous waste incinerator.

Operation of the hazardous waste incinerator is regulated by air pollution control regulations, including the hazardous waste combustor MACT standards, and by the draft RCRA permit.

Conditions, limits, and restrictions which have been superseded by equivalent or more stringent requirements under the hazardous waste combustor MACT standards are no longer included in the facility's RCRA permit.

The draft permit proposes that the facility continue its corrective action program. Ohio EPA is currently working on a draft Statement of Basis (not a part of this draft permit) that is expected to propose implementation of additional corrective measures to further control risks identified in the corrective action program.

**What is the regulatory basis to support this permit renewal?**

The Director has determined that Ross incineration Services, Inc. has submitted an application for renewal one hundred eighty (180) days prior to the expiration date of its present permit which was issued by Ohio EPA on September 30, 2003. The Director has considered the application, inspection reports, a report regarding the facility's compliance with the present permit, and the rules adopted under ORC Section 3734. The Director has found that the Part B permit application meets the Director's performance standards and that the facility has a history of compliance with this chapter, rules adopted under it, the existing permit, and orders entered into, which demonstrates reliability, expertise, and competency to subsequently operate the facility under this chapter, the rules, and the permit.

### **Who can I contact for more information?**

For additional information, please contact Neil Wasilk of Ohio EPA, Northeast District Office at (330) 963-1165 or Jae Lee of the U.S. EPA Regional Office in Chicago, Illinois at (800) 621-8431 ext. 63781.

## **PUBLIC NOTICE**

**Lorain County**

### **HAZARDOUS WASTE DRAFT RENEWAL PERMIT ISSUANCE**

On September 27, 2013, Ohio EPA and U.S. EPA issued a draft renewal Hazardous Waste Facility Installation and Operation Permit (Permit) to Ross Incineration Services, Inc. (RIS) and Ross Consolidated Corp. (RCC), U.S. EPA ID Number OHD 048415665, for its facility located at 36790 Giles Road, Grafton, OH 44044. RIS owns and operates a commercial hazardous waste treatment and storage facility. RCC owns the land on which the facility is located. The primary service offered by this facility is treatment by incineration of hazardous waste from off-site generators. The purpose of this Permit is to allow RIS to continue the following hazardous waste management activities: container and tank storage, treatment in tanks, filter press and by incineration, closure, post-closure and corrective action. To issue this Permit, Ohio EPA determined that the Permit application is complete and meets appropriate standards and that the applicant has a history of compliance with relevant environmental laws and demonstrates sufficient reliability, expertise, and competency to operate a hazardous waste facility. A public hearing for this Permit will be held on Thursday, November 21, 2013 at 6 p.m. at the Grafton-Midview Public Library, 983 W. Main Street, Grafton, Ohio 44044 to receive public comments. You may send written comments concerning this Permit to Ohio EPA, Division of Materials and Waste Management, P.O. Box 1049, Columbus, Ohio 43216-1049, no later than the close of business on November 22, 2013. A copy of the Permit can be viewed at: Grafton-Midview Public Library, 983 Main Street, Grafton, Ohio EPA Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087, Tel: (330) 963-1200, Ohio EPA Division of Materials and Waste Management, 50 W. Town Street, Suite 700, Columbus, Ohio 43215, Tel: (614) 644-2621, and online under the "Stakeholder input" tab at: [epa.ohio.gov/dmwm/](http://epa.ohio.gov/dmwm/).

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

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

Permittee: Ross Incineration Services, Inc.

Mailing  
Address: Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044

Owner: Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044

Ross Consolidated Corp.  
36790 Giles Road  
Grafton, OH 44044

Operator: Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044

Location: Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044

US EPA ID: OHD 048 415 665

Issue Date:

Effective Date:

Expiration Date:

AUTHORIZED ACTIVITIES

In reference to the application of Ross Incineration Services, Inc. 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:

- **Incineration of hazardous waste;**
- **Storage of hazardous waste in tanks and containers;**
- **Treatment of hazardous waste in tanks and a filter press;**
- **Post-Closure;**
- **Corrective Action**

PERMIT APPROVAL

\_\_\_\_\_  
Scott J. Nally, 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 \_\_\_\_ day of \_\_\_\_\_, 2013.

By \_\_\_\_\_ 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 store hazardous waste in containers and tanks and to treat hazardous waste in tanks and a filter press and to treat hazardous waste by incineration in accordance with the terms and conditions of this Ohio hazardous waste permit (hereinafter "permit"), ORC Chapter 3734, all applicable Ohio hazardous waste rules, all applicable regulations promulgated under the Resource Conservation and Recovery Act (RCRA), as amended, and the permit application. The permit application, as submitted to Ohio EPA on April 1, 2013 and last updated on September 18, 2013, 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), 3745-49-03 and 3745-50-30, and ORC Section 3734.07

- (a) The Permittee must allow the Director, or an authorized representative, upon stating the purpose and necessity of the inspection and upon proper identification, to:
  - (i) enter, at reasonable times, upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the terms and conditions of this permit;
  - (ii) have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
  - (iii) inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the terms and conditions of this permit; and
  - (iv) sample, document, or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 3734 and the rules adopted thereunder, any substances or parameter at any location.
- (b) Any record, report or other information obtained under the hazardous waste rules or Chapter 3734 of the Revised Code shall not be available to the public upon the Permittee's satisfactory showing to Ohio EPA that all or part of the information would divulge methods or processes entitled to protection as trade secrets pursuant to Ohio Trade Secret Law and OAC Rules 3745-49-03 and 3745-50-30.

A.12 Monitoring and Records

OAC Rule 3745-50-58(J)

- (a) Any sample and measurement taken for the purpose of monitoring must be representative of the monitored activity. Further, a sample must be a representative sample, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of OAC Rule 3745-51-20, Laboratory Methods. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition, as amended by Updates I, II, IIA, IIB, III and IIIA, and additional supplements or editions thereof; Standard Methods for the Examination of Water and Wastewater: Twentieth Edition, 1999; or an equivalent method as specified

in the approved waste analysis plan, or as this term is defined and used in the Ohio hazardous waste rules.

- (b) Records of monitoring information must specify the:
  - (i) date(s), exact place(s), and time(s) of sampling or measurements;
  - (ii) individual(s) who performed the sampling or measurements;
  - (iii) date(s) analyses were performed;
  - (iv) individual(s) who performed the analyses;
  - (v) analytical technique(s) or method(s) used; and
  - (vi) results of such analyses.

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

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

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

- (a) The Permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by OAC Rule 3745-54-73(B)(9), and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application.
- (b) The record retention period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding the facility.
- (c) The Permittee must maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the permit application and any amendments, supplements or modifications of such application. The Permittee must retain a complete copy of the current application for the effective life of the permit as indicated in Permit Condition A.3.

- (d) The Permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- (e) Reserved.
- (f) Corrective Action records must be maintained at least three (3) years after all Corrective Action activities have been completed.

A.15 Planned Changes

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

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

A.16 Waste Shipments

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

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

A.17 Anticipated Noncompliance

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

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

A.18 Transfer of Permits

OAC Rules 3745-50-52, 3745-50-58(L)(3) and 3745-54-12

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

relieve the new owner or operator of its obligation to comply with all applicable requirements.

A.19 Compliance Reports

OAC Rules 3745-50-58(L)(5) and 3745-50-50

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

A.20 Immediate Reporting of Noncompliance

OAC Rule 3745-50-58(L)(6)

- (a) The Permittee must report orally to Ohio EPA's Division of Environmental Response and Revitalization within twenty-four (24) hours from the time the Permittee becomes aware of any noncompliance with this permit, ORC Chapter 3734 or the rules adopted thereunder, which may endanger human health or the environment, including:
- (i) information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies; and
  - (ii) any information of a release or discharge of hazardous waste or a fire or explosion from the hazardous waste facility, which could threaten the environment or human health outside the facility.
- (b) The report must consist of the following information (if such information is available at the time of the oral report):
- (i) name, address, and telephone number of the owner or operator;
  - (ii) name, address, and telephone number of the facility;
  - (iii) date, time, and type of incident;
  - (iv) name and quantity of material(s) involved;
  - (v) the extent of injuries, if any;
  - (vi) an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
  - (vii) estimated quantity and disposition of recovered material that resulted from the incident.

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

- (a) A written report must also be provided to Ohio EPA's Division of Environmental Response and Revitalization and the Division of Materials and Waste Management 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.
- (c) The Permittee need not comply with the five (5) day written report requirement if the Director, upon good cause shown by the Permittee, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

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

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

A.23 Reserved

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

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

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

In accordance with ORC Chapter 3734 and the rules adopted thereunder, the Permittee may request confidentiality for any information required to be submitted by the terms and conditions of this permit, or any information obtained by the

Director, or an authorized representative, pursuant to the authority provided under Permit Condition A.11.

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

The fees for the off-site disposal and/or treatment of hazardous wastes, calculated pursuant to OAC Rules 3745-50-33 and 3745-50-35, and payable to the Treasurer of the State, must be submitted to the Director on or before the fortieth day after the end of the month to which the return applies. The Permittee subject to these requirements must prepare and file with the Director monthly returns showing the total tonnage disposed and/or treated and the total amount of the fee to be submitted to the Director.

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

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

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

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

And

Ohio Environmental Protection Agency  
Northeast District Office  
Division of Materials and Waste Management  
2110 E. Aurora Road  
Twinsburg, Ohio 44087

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

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

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

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

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

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

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

During the life of the permit the 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 3745-55-43, the following documents (including amendments, revisions and modifications):
- (i) waste analysis plan, developed and maintained in accordance with OAC Rule 3745-54-13 and the terms and conditions of this permit;
  - (ii) contingency plan, developed and maintained in accordance with OAC Rule 3745-54-53 and the terms and conditions of this permit;
  - (iii) closure plan, developed and maintained in accordance with OAC Rule 3745-55-12 and the terms and conditions of this permit;
  - (iv) cost estimate for facility closure, developed and maintained in accordance with OAC Rule 3745-55-42 and the terms and conditions of this permit;
  - (v) personnel training plan and the training records, developed and maintained in accordance with OAC Rule 3745-54-16 and the terms and conditions of this permit;
  - (vi) operating record, required by OAC Rule 3745-54-73 and the terms and conditions of this permit;
  - (vii) inspection schedules, developed in accordance with OAC Rules 3745-54-15, 3745-55-74 and 3745-55-95 and the terms and conditions of this permit;
  - (viii) post-closure plan, as required by OAC Rule 3745-55-18(A) and the terms and conditions of this permit;
  - (ix) annually-adjusted cost estimate for facility closure and post-closure, as required by OAC Rules 3745-55-42 and 3745-55-44 and the terms and conditions of this permit; and
  - (x) all other documents required by Module A, Permit Condition A.12.
- (b) The Permittee must maintain copies of all inspection logs at the facility for a period not less than three (3) years from the date of inspection.

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

- (a) The Permittee must submit a Waste Minimization Report describing the waste minimization program required by OAC Rules 3745-54-75(H), (I), and (J); 3745-54-73(B)(9); and 3745-52-20(A) at least once every five years. The provisions of OAC Rules 3745-54-75(H), (I) and (J); and 3745-54-73(B)(9) must be satisfied biennially.
- (b) The Permittee must submit the Waste Minimization Report to Ohio EPA's Office of Compliance Assistance and Pollution Prevention within one hundred eighty (180) days of the effective date of this permit, and must submit updates to this report once every five years thereafter.

A.30 Compliance Terminology Definitions

For purposes of conducting compliance activities, the following definitions apply wherever these terms are used in the Permit and Application, except as otherwise noted:

- "Daily": Once each calendar day.
- "Weekly": Once each calendar week. A calendar week begins on Sunday and ends on Saturday.
- "Monthly": Once each calendar month.
- "Quarterly": Four times each calendar year: once between January 1 and March 31, once between April 1 and June 30, once between July 1 and September 30, and once between October 1 and December 31.
- "Semi-Annually": Twice each calendar year: once between January 1 and June 30, and once between July 1 and December 31.
- "Annually": Once each calendar year between January 1 and December 31. The event must not occur more than fifteen months from the previous year's event.
- "Penta-Annually": Once during the fifth (5<sup>th</sup>) calendar year for a scheduled activity.

Note: If the Permittee is in an operational shutdown mode during a scheduled compliance activity, such that the activity cannot be

performed or is unwarranted, the applicable recordkeeping document (e.g., an inspection form) will denote this.

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## 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 operate and maintain the facility in accordance with fire, explosion, or release prevention procedures, practices and design specifications provided in Sections D, F and G of the permit application.

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

##### (a) Hazardous Waste from Off-Site Sources

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

##### (b) Hazardous Wastes from Foreign Sources

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

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

- (a) Before the Permittee treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under OAC Rule 3745-55-13(D), the Permittee must obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of

the waste in accordance with the requirements of Chapters 3745-54 to 3745-57, 3745-205, and 3745-270 of the Administrative Code.

- (b) The Permittee must follow the procedures described in the waste analysis plan found in Section C of the permit application and the terms and conditions of this permit.
- (c) Bulk solid wastes received in roll offs, dump trailers and other bulk shipping containers, defined as containers larger than 793 gallons volumetric capacity, must be sampled from at least three locations in the waste container. The Permittee must determine whether more than three sampling points within each container are necessary for a specific waste, giving appropriate consideration to how heterogeneous the waste is, the objective of the sampling and any other relevant factors. A shovel, scoop, trowel or other appropriate sampling tool must be used to draw a sample from a one foot deep cross section at each sampling location.

The sampling locations must include one location near the center of the container, one location in the back quarter of the container, and one location in the front quarter of the container, unless construction of the container make such point or points inaccessible, in which case the inaccessible point or points shall be replaced with a point or points selected at random. If more than three samples are needed, the additional sampling point or points shall be picked at random.

The samples for a given container may be composited together to create one sample that represents a particular bulk shipment.

**B.4 Security**  
OAC Rule 3745-54-14

The Permittee must comply with the security provisions of OAC Rule 3745-54-14(B)(1) and (C) and Section F of the permit application.

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

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

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

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

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

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

B.8 Location Standards  
OAC Rule 3745-54-18

The Permittee must operate and maintain the facility to prevent washout of any hazardous waste by a 100-year flood, as required by OAC Rule 3745-54-18(B)(1) and as specified in the plans and specifications in Section B of the permit application. To prevent washout and overtopping during a flood, facility protective dikes shall be inspected and maintained in good condition and at the elevations indicated in Section B of the permit application.

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, Sections D, F and G 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, Sections D and F of the permit application and the terms and conditions of this permit.

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, with the following exceptions:
  - (i) a fire located in or on an incinerator waste feed mechanism or the incinerator feed structure if the fire can be controlled with hand-held fire extinguishers; or,
  - (ii) a fire involving 55 gallons or less of hazardous waste or one pound or less of untreated acute hazardous waste (i.e., P-coded waste), that can be extinguished with a hand-held extinguisher and does not require the fire department to extinguish; or,
  - (iii) a fire in the deslagger or its associated equipment that does not require the emergency response team or the fire department to extinguish.

- (b) Any explosion involving hazardous waste, except that implementation is not required for:
  - (i) an explosion within the incineration system that does not result in a release of fugitive emissions, hazardous waste or hazardous waste constituents to the environment; or,
  - (ii) an explosion in the deslagger or associated equipment that does not result in a release of fugitive emissions, hazardous waste or hazardous waste constituents to the environment.
- (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, except that implementation is not required for:
  - (i) an uncontrolled hazardous waste reaction that is contained by an air emissions control system; or,
  - (ii) an uncontrolled hazardous waste reaction that does not require the emergency response team or outside assistance to contain.
- (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.
- (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.
- (f) Occurrence of any event listed in Sections 3 or 4 of the Contingency Plan Implementation Criteria in Table G-2 in Section G of the permit application.

**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 Environmental Response and Revitalization.

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

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

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

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

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

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

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

- (a) 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) The Permittee is authorized to maintain portions of the operating record required by OAC Rule 3745-54-73 that are more than three years old at an off-site location with the following conditions:
  - (i) The off-site location must be listed in the permit application. The listing must include the address of the records storage site and a

description of which portion of the record is maintained at that site. Changes and/or additions to storage site locations detailed in the permit application must be made through the permit modification process described in OAC Rule 3745-50-51.

- (ii) All portions of the operating record maintained at off-site locations must be available for Ohio EPA review at the Permittee's facility within two (2) business days of the request, unless this is clearly not reasonable, in which case the Permittee will establish the most expeditious schedule practicable and immediately notify Ohio EPA of the anticipated schedule.
- (c) The Permittee is authorized to maintain original copies of waste analysis information collected through Waste Product Survey (WPS) development and update activities (i.e., WPS sheets, attachments and the waste analyses used to develop WPS sheets) and initial notices to generators, as specified in paragraph (B) of OAC Rule 3745-54-12, at the Ross Environmental Services Business Center, provided that
  - (i) All WPS Sheets are accessible at the facility through an electronic data retrieval system from which paper copies can be printed;
  - (ii) Facsimile or original copies of all waste analysis data used to develop WPS sheets are made available to Ohio EPA within one business day; and
  - (iii) All portions of the operating records maintained at the Ross Environmental Services Business Center are made available upon request for inspection by Ohio EPA.
- (d) The Permittee is authorized to collect, store and/or manage data required by its Permit or application in hard or electronic copy. Electronic data will also be available within a reasonable time in hard copy upon agency request.

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

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

**B.24 Manifest System**

OAC Rules 3745-54-70, 3745-54-71, 3745-54-72 and 3745-54-76

- (a) In managing waste at the facility the Permittee must comply with OAC Chapter 3745-52 and OAC Rules 3745-54-71, 3745-54-72 and 3745-54-76 with regard to the manifest system.
- (b) Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved with fifteen (15) days after receiving the waste, the Permittee must submit a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest, to the Director in accordance with OAC Rule 3745-54-72.
- (c) Unmanifested waste report. If the Permittee receives unmanifested waste which is not excluded from the manifest requirements of OAC Rule 3745-51-05, then the Permittee must submit an unmanifested waste report to the Director within fifteen (15) days after receipt of the waste. The report must include the information required under OAC Rule 3745-54-76.

**B.25 Biennial Report and Additional Reports**

OAC Rules 3745-54-75 and 3745-54-77

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

**B.26 Closure Performance Standard**

OAC Rule 3745-55-11

During facility closure, the Permittee must implement the provisions of the closure plan found in Section 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 Ohio EPA Northeast District Office within 5 working days prior to all rinsewater and soil sampling.

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

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

B.34 Survey Plat  
OAC Rule 3745-55-16

The Permittee must submit a survey plat to the Director and the local zoning authority no later than the submittal of certification of closure of each hazardous waste disposal unit, in accordance with OAC Rule 3745-55-16.

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

(a) Post-Closure Care Period

The Permittee must continue post-closure care for surface impoundment SWI 7 for 30 years after the date of closure. Post-closure care must be in accordance with OAC Rule 3745-55-17 and the Post-Closure Plan in Section I-4 of the permit application. The approved Post-Closure Plan does not include the phrase "according to a performance based system and" on Page E-1 of the application.

(b) Post-Closure Security

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

(c) Amendment to Post-Closure Plan

The Permittee must amend the Post-Closure Plan, when necessary, in accordance with OAC Rule 3745-55-18(D).

(d) Post-Closure Notices

(i) No later than 60 days after certification of closure of each hazardous waste disposal unit, the Permittee must submit to the Director and the local zoning authority records of the type, location, and quantity of hazardous waste disposed of within each cell or disposal unit, in accordance with OAC Rule 3745-55-19(A).

(ii) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the Permittee must do the following:

(1) Record a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, which contains the information required by OAC Rule 3745-55-19(B)(1).

(2) Submit to the Director a certification that the Permittee has recorded the notation and submit a copy of the document in which the Permittee placed the notation.

(3) The Permittee must request and obtain a permit modification prior to post-closure removal of hazardous wastes, hazardous waste residues, liners, or contaminated soils, in accordance with OAC Rule 3745-55-19(C).

(e) Certification of Completion of Post-Closure Care

No later than sixty days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee must certify that the post-closure care period was performed in accordance with the specifications in the Post-Closure Plan and the terms and conditions of this permit, as required by OAC Rule 3745-55-20. The Permittee must furnish to the Director, upon request, documentation supporting the certification.

**B.36 Cost Estimate for Facility Closure and Post-Closure**  
OAC Rules 3745-55-42 and 3745-55-44

- (a) The Permittee's most recent closure and post-closure cost estimate, prepared in accordance with OAC Rule 3745-55-42 and 3745-55-44 is specified in Section I of the permit application.
- (b) The Permittee must adjust the closure and post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with OAC Rule 3745-55-43 and 3745-55-45.
- (c) The Permittee must revise the closure cost estimate and post-closure cost estimate whenever there is a change in the facility's Closure Plan and Post-Closure Plan that increases the cost of closure and post-closure care, as required by OAC Rule 3745-55-42(C) and 3745-55-44(C).
- (d) The Permittee must submit to the Ohio EPA and keep at the facility the latest closure cost estimate and post-closure cost estimate as required by OAC Rules 3745-55-42(D) and (E) and 3745-55-44(D) and (E).

**B.37 Financial Assurance for Facility Closure and Post-Closure**

The Permittee must maintain continuous compliance with OAC Rules 3745-55-43, 3745-55-45, and 3745-55-46 and provide documentation of financial assurance, which meets the requirements of OAC Rule 3745-55-51, in at least the amount of the cost estimates required by Permit Condition B.36.

**B.38 Liability Requirements**

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.

The Permittee also must demonstrate compliance with OAC Rule 3745-55-47(B) by maintaining liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence, with an annual aggregate of at least \$6 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 and as set forth in Section C of the permit application.

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## MODULE C - CONTAINERS STORAGE & TREATMENT

### C. CONTAINER STORAGE AND MANAGEMENT

Containers of hazardous waste are stored in the 1) Bulk Storage Areas (BSA No. 1 and No. 2), 2) Oxidizer Storage Building (OSB), and, 3) Container Storage Facility (CSF).

BSA No. 1 is outdoors on concrete containment with approximate dimensions of 51 feet by 99 feet and used for storage of hazardous waste without free liquids in roll-offs and other containers. It can store the equivalent of 16 twenty cubic yard roll-offs (i.e., 64,632 gallons).

BSA No. 2 is outdoors on concrete containment with approximate dimensions of 60 feet by 125 feet and used for storage of hazardous waste without free liquids in roll-offs and other containers. It can store the equivalent of 20 twenty cubic yard roll-offs (i.e., 80,790 gallons).

The OSB is a 21 feet by 80 feet steel building used to store containers of oxidizer and organic peroxide waste, in addition to the permitted oxidizer waste storage in the CSF. The OSB is designed to hold 144 fifty-five gallon drums (i.e., 7,920 gallons).

The Container Storage Facility is an open-sided covered building with dimensions of approximately 257 feet by 60 feet that is used for storage of containers of wastes from off-site generators and certain on-site generated wastes. Containers stored in the Container Storage Facility include various types of steel, plastic and composite drums, pails, buckets and boxes as well as bulk containers such as roll-offs and truck tankers. Containers with and without free liquids may be stored in the Container Storage Facility. The Container Storage Facility has adequate secondary containment.

Typical hazardous waste types received at the facility in containers include: halogenated and non-halogenated spent solvents, paint wastes, off-specification commercial chemical products and spill residues. Waste generated at the facility and stored in containers consists primarily of treatment residuals from the incineration process.

The Container Storage Facility includes 18 separate storage bays. Containers accepted from off-site generators for storage in the Container Storage Facility must meet the US-DOT specifications found in 49 CFR 178. Non-bulk containers such as drums, pails, buckets and boxes are stored in racks. Bulk containers, such as roll-offs and truck tankers, are stored in the tanker bays in the Container Storage Facility. Drums, pails, buckets and boxes, subject to waste type and quantity restrictions, may also be stored in the tanker bays in the Container Storage Facility.

Containers of hazardous waste may be accepted for storage and re-shipment to other hazardous waste treatment, storage and disposal facilities. The wastes in re-shipped containers typically carry waste codes that the facility is permitted to store, but not to incinerate.

Containers of hazardous waste may be repackaged at designated locations within the facility into alternate containers to facilitate management of the waste. Liquid wastes received in tanker trucks may be transferred to tankers operated by the facility (i.e., yard tankers) for direct feeding from a tanker into the incinerator.

#### C.1 Container Storage/Quantity Limitation

- (a) The Permittee is authorized to store 610,373 gallons of hazardous waste at any given time in the permitted container areas: Container Storage Facility (CSF), Bulk Storage Areas (BSA No. 1 and No. 2), and Oxidizer Storage Building (OSB). The hazardous waste container storage volume in each of the four permitted container storage units will at no time exceed the unit's respective design storage volume. The Permittee shall store hazardous waste in the types of containers (size and type) described in Section D of the permit application. The Permittee may not store containers for more than one year.
- (b) The Permittee shall at all times have access to its current container storage volume via its computer tracking system and be able to demonstrate compliance with its permitted container storage capacity limitation.
- (c) Permit Conditions C.1(a), C.2 and C.3 shall not apply to the Permittee's activities as a generator accumulating hazardous waste on-site in compliance with OAC Rule 3745-52-34 and 40 CFR Part 265, subparts AA, BB, and CC.

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

- (d) The Permittee may receive and store wastes in containers without intending to treat said wastes. The Permittee may ship these wastes to another permitted facility for treatment, storage or disposal. The Permittee will handle said wastes in accordance with the practices and procedures in Sections C and D of the permit application.

C.2 Limitations on Treatment of Hazardous Waste in Containers

- (a) The Permittee shall not treat wastes in containers, except by processing in the incineration unit.
- (b) Permit Condition C.2(a) shall not apply to the Permittee's activities as a generator treating hazardous waste in containers on-site in compliance with OAC Rule 3745-52-34.

C.3 Waste Identification

The Permittee must store in containers only the hazardous waste codes specified with process code SO1 in Section A of the permit application. The Permittee is prohibited from storing wastes in containers inconsistent with the restrictions and prohibitions in Table C1-1 of Section C of the permit application.

C.4 Condition of Containers  
OAC Rule 3745-55-71

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee must transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with Sections D and F of the permit application, the conditions of this permit and the hazardous waste facility chapters of the OAC.

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

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

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

- (a) All container storage shall be conducted within the container storage units as described in Condition C.1. of this permit and Section D of the permit application.
- (b) The Permittee must keep all containers closed during storage, except when it is necessary to add or remove waste, and must not open, handle, or store containers in a manner which may rupture the container or cause it to leak.

- (c) Lab-pack wastes received at the facility shall be handled in compliance with applicable storage requirements and Sections C and D of the permit application.
- (d) The Permittee shall conduct the following container management activities in accordance with the procedures and practices specified in Section D of the permit application: container storage and receiving, repackaging of wastes, transportation of wastes through the facility and special handling of containers. Repackaging of wastes may only be conducted in the following areas:
  - (i) All concrete areas surrounding the incinerator;
  - (ii) Concrete pad west of the old process dock;
  - (iii) Concrete pads east or west of the process dock;
  - (iv) Concrete pad at the staging areas in the Container Storage Facility;
  - (v) The concrete loading/unloading area by the closed loop scrubber water system;
  - (vi) The concrete loading/unloading area by and in the Caustic Building;
  - (vii) Repackaging room;
  - (viii) Within the Process Dock Building.

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

- (a) The Permittee must maintain the containment systems in accordance with the plans and specifications contained in Section D of the permit application.
- (b) For units storing wastes with free liquids, the Permittee must maintain the containment systems as described in the permit application, designed with sufficient capacity to contain ten percent of the total volume of the containers or the volume of the largest container, whichever is greater. The containment system must be free of cracks and gaps and sufficiently impervious to contain leaks and spills and accumulated precipitation until the collected material is detected and removed.
- (c) The base of each containment system must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

- (d) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in Permit Condition C.7(b) above. For units only storing wastes without free liquids, the units must be operated to drain or remove liquid resulting from precipitation in a timely manner to prevent overflowing of the containment system.
- (e) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner and in accordance with the procedures and practices specified in Section D of the permit application.
- (f) No hazardous wastes with free liquids shall be stored in the Bulk Storage Areas (BSA No. 1 and No. 2).

C.8 Reserved

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

The Permittee must inspect the container storage areas in accordance with the inspection schedule contained in Section F of the permit application and in accordance with OAC Rule 3745-54-15. The inspection schedule must be designed to detect for leaking containers, deteriorating containers, and/or containment systems. The Permittee must note the results of these inspections in the inspection log along with any remedial action taken. Each container in storage for six months or more shall be inspected and stored in accordance with Section F-2b(1) of the permit application and the inspection results shall be recorded in the facility operating record.

C.10 Recordkeeping  
OAC Rule 3745-54-73

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

C.11 Special Container Provisions for Ignitable or Reactive Waste  
OAC Rules 3745-54-17 and 3745-55-76

- (a) The Permittee must not store ignitable or reactive waste except in accordance with OAC Rules 3745-54-17 and 3745-55-76.
- (b) The Permittee must not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.

- (c) The Permittee must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and shall follow the storage procedures specified in Sections C, D and F of the permit application.

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

- (a) The Permittee must not store incompatible waste except in accordance with OAC Rules 3745-54-17(B) and 3745-55-77.
- (b) The Permittee must not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
- (c) The Permittee must separate or protect (by means of a dike, berm, wall, or other device) a storage container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments.
- (d) Only oxidizer and organic peroxide wastes shall be stored in the Oxidizer Storage Building. Such storage shall be in accordance with the procedures and practices specified in Section D of the permit application.

C.13 Reserved

C.14 Closure and Post-Closure  
OAC Rules 3745-55-10 through 3745-55-20, and 3745-55-78

At closure of the container areas, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment systems, in accordance with the procedures in the Closure Plan set forth in Section I of the permit application.

## MODULE D - TANK STORAGE, TREATMENT AND MANAGEMENT

### D. MODULE HIGHLIGHTS

A total of 49 hazardous waste tanks are included in this permit. There are 45 storage tanks and 4 tanks that are both storage and treatment tanks. All tanks are above-ground tanks. All of the tanks have been provided with a secondary containment system constructed of a reinforced concrete liner external to the tanks and a reinforced concrete retaining wall around the perimeter. All containment systems have an impermeable coating to make the secondary containment system impervious to the waste stored. The secondary containment system for all tanks is designed to contain greater than 100 percent of the capacity of the largest tank within its boundary plus precipitation from a 25-year 24-hour rainfall.

Wastes managed in most tanks are received from off-site generators, but several tanks are dedicated to on-site generated wastes. Most of the off-site generated wastes managed in these tanks are transferred from tank trucks, but some wastes are transferred from containers into tank storage. Wastes managed in these tanks fall into one or more of the following categories: high or low BTU wastes, halogenated wastes, flammable and/or ignitable wastes, fly ash sludge, and/or scrubber water. A system is in place to evaluate wastes for potential incompatibilities prior to placing wastes in these tanks.

One treatment tank treats residuals from the incineration process including fly ash, sludges and scrubber water. Three treatment tanks are part of the vacuum pump system for transferring wastes, including high and/or low BTU wastes, halogenated, flammable and/or ignitable wastes, from drums, tank trucks and other containers to the tank storage system.

All tanks are equipped with appropriate overfill prevention and, where required, over-pressure systems.

#### D.1 Tank Storage Quantity Limitation/Waste Identification

- (a) The Permittee may store a total volume of 1,122,216 gallons of hazardous waste in 49 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:

Storage Tanks Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Month/Year of Construction
Tank Farm I Tanks 23-36	9,920 each	10 ft. (diam.) x 22.5 ft.	Yes - in place	High BTU halogenated, flammable and/or ignitable wastes	June, 1982 (Existing tanks for OAC Chapter 3745-55)
Tank Farm II Tanks 37-50	9,920 each	10 ft. (diam.) x 22.5 ft.	Yes - in place	High or Low BTU halogenated, flammable and/or ignitable wastes	December, 1987 (New tanks for OAC Chapter 3745-55)
Tank Farm III Tanks 51-64	9,920 each	10 ft. (diam.) x 22.5 ft.	Yes - in place	Low BTU halogenated, flammable and/or ignitable wastes	December, 1987 (New tanks for OAC Chapter 3745-55)
Tanks 67 and 68	3,627 each	6 ft. 4 in. (diam.) x 17 ft. 0.4 in.	Yes - in place	Fly ash sludge and scrubber water prior to filter pressing	January 2009 (New tanks for OAC Chapter 3745-55)
Tank 75	617,000	50 ft. (diam.) x 42 ft.	Yes - in place	Fly ash sludge and scrubber water and/or sludge	September, 1988 (New tank for OAC Chapter 3745-55)

Treatment and Storage Tanks Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Month/Year of Construction.
Tank 70 Hazardous waste storage and treatment tank- Condensation Tank	9,920 gallons for storage; (Combined treatment capacity of tanks 70, 73 and 74 is 72,000 gallons per day.)	10 ft. (diam.) x 22.5 ft.	Yes - in place	Condensation vapors from tanks 73 & 74, high or low BTU halogenated, flammable and/or ignitable wastes	December, 1987 (New tank for OAC Chapter 3745-55)

Treatment and Storage Tanks Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Month/Year of Construction.
Tank 73 & 74 Hazardous waste storage and treatment tanks-Vacuum Tanks	7,500 gallons each for storage; (Combined treatment capacity of tanks 70, 73 and 74 is 72,000 gallons per day.)	10 ft. (diam.) x 10.5 ft.	Yes - in place	High and/or low BTU wastes, halogenated, flammable and/or ignitable wastes	December, 1987 (New tanks for OAC Chapter 3745-55)
Tank 79 Hazardous waste storage and treatment tank- Surge tank	56,402 gallons for storage; (Treatment capacity is 50,000 gallons per day.)	20 ft. (diam.) x 24 ft.	Yes - in place	Fly ash sludge, scrubber water, and/or sludge generated on-site for on-site treatment only	2010 (New tank for OAC Chapter 3745-55)

- (b) The Permittee shall store in tanks only the hazardous waste codes specified in Section A of the permit application with process code SO2. The Permittee shall treat in tanks only the hazardous waste codes specified in Section A of the permit application with process code TO1.
- (c) The Permittee is prohibited from storing or treating in tanks hazardous waste that is not identified in this permit condition. The Permittee is prohibited from any storage or treatment of wastes in tanks inconsistent with the restrictions and prohibitions in Table C1-1 of Section C of the permit application. The Permittee shall not store characteristically corrosive wastes or wastes with a corrosion rate greater than 50 mils per year in tanks.

**D.2 Limitations on Treatment of Hazardous Waste in Tanks**

- (a) The Permittee is authorized to treat hazardous waste in Tanks 70, 73, 74 and 79 which are specified as storage and treatment tanks in the table in Condition D.1. The Permittee must not exceed the treatment capacities specified in the table in Condition D.1. The Permittee shall treat in these tanks only the hazardous waste codes specified in the permit application.
- (b) The provision of Condition D.2(a) shall not apply to the Permittee's activities as a generator treating hazardous waste in tanks on-site in compliance with the provisions of OAC Rule 3745-52-34.

However, when treating waste in tanks in accordance with OAC Rule 3745-52-34, the Permittee shall not, for the total amount of hazardous waste

treated, exceed the maximum throughput capacity established under this Condition.

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

- (a) The Permittee must construct any future new tank systems in accordance with Section D-2c of the permit application.
- (b) Prior to operation of any 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 requirements of OAC Rule 3745-55-93(B) through (F), and Sections D and F of the permit application.

New tanks at the facility are Tanks 37-64, 67, 68, 70, 73, 74, 75 and 79.

- (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: Tanks 23-36.

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.

- (c) The Permittee shall operate and maintain all tank systems listed in Condition D.1 in accordance with the procedures, practices and design conditions identified in Section D of the permit application.

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) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
  - (ii) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and
  - (iii) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- (d) The Permittee must document compliance with Permit Condition D.6 in the operating record of the facility.
- (e) The Permittee must monitor and test the tank systems in accordance with the Tank Corrosion Inspection Plan in Appendix D-1 of Section D of the permit application.
- (f) The Permittee must immediately remove from service any tank with a wall thickness, as determined from UT thickness testing or internal inspection, that is less than the design minimum wall thickness for either the top, shell or bottom of the tank. The applicable design minimum wall thickness for the tank corrosion monitoring program is: the value specified in Tables D2-2 through D2-8 and Table D5-3 in the application for the minimum design top thickness, minimum design shell thickness and minimum design bottom thickness, respectively.

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

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

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

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

- (iii) The Permittee must immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.

(b) Unless the requirements of Permit Conditions D.7(b)(i) through D.7(b)(vi) are satisfied, the Permittee must close its tank system in accordance with OAC Rule 3745-55-97 and its Closure Plan if there has been a leak or spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use.

- (i) For a release caused by a spill that has not damaged the integrity of the system, the Permittee must remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.
- (ii) For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee must repair the primary system prior to returning it to service.

- (iii) For a release to the environment caused by a leak from a component of the tank system that is below ground and does not have secondary containment, the Permittee must provide this component with secondary containment that meets the requirements of OAC Rule 3745-55-93 before the component can be returned to service.
  - (iv) For a release to the environment caused by a leak from the aboveground portion of the tank system that does not have secondary containment, and can be visually inspected, the Permittee must repair the tank system in accordance with Permit Condition D.7(c) before returning it to service.
  - (v) For a release to the environment caused by a leak from the portion of the tank system component that is not readily available for visual inspection, the Permittee must provide secondary containment for the entire component that meets the requirements of OAC Rule 3745-55-93 before the component can be returned to service.
  - (vi) If the Permittee replaces a component of the tank system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in OAC Rules 3745-55-92 and 3745-55-93.
- (c) For all major repairs (e.g., installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault) to eliminate leaks or restore the integrity of the tank system, the Permittee must obtain a certification by an independent, qualified, registered professional engineer in accordance with OAC Rule 3745-50-42(D)(1) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. This certification must be submitted to the Director within seven days after returning the tank system to use.

D.8 Recordkeeping and Reporting

OAC Rules 3745-55-96, 3745-55-91(A), and 3745-55-92(G)

- (a) The Permittee must report to the Director, within 24 hours of detection, when 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.

**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.

- (c) The Permittee must follow the fire and explosion prevention procedures and practices in Section D of the permit application when storing or placing ignitable or reactive waste in a tank system.

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.
- (c) The Permittee shall follow the procedures and practices to identify incompatible wastes and to prevent simultaneously placing incompatible wastes in the same tank that are identified in Sections C and D of the permit application.

D.12 Reserved

## MODULE E - CORRECTIVE ACTION REQUIREMENTS

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

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

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

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

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

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

USEPA prepared an RFA (RCRA Facility Assessment) report for the Permittee's facility dated July 21, 1987. The RFA identified potential releases and potential release pathways including groundwater, soils, surface water and air. Based on the results of the RFA, the Permittee was required to implement an RFI. Consequently

a Corrective Action Program requirement was added to Section VI of the U.S. EPA RCRA Part B Permit issued to the Permittee on September 8, 1988.

The Permittee began implementation of the RFI by preparing the Facility Background Report that was submitted to U.S. EPA on May 3, 1989. The Facility Background Report provided an historical site profile and environmental setting of the facility. The historical site profile provided a description of ownership, facility operation, a site description, a summary of solid waste management units (WMUs or SWMUs) and the volume and types of wastes handled, and a chronology of the waste management practices that have been conducted throughout the life of the facility. The environmental setting provided an initial description of the hydrogeological, geological and meteorological characteristics of the site.

The Facility Background Report indicates that various waste treatment and waste management practices have occurred at the facility since it began operating in 1949. Consequently, different sections of the site have had multiple and overlapping uses during the years of operation. The Permittee's RFI Work Plan designates four SWMU Areas where past waste management practices occurred and SWMUs are located. Detailed SWMU descriptions are found in the Permittee's Facility Background Report, Section 2.4 "Chronology of Known Waste Management Practices" (Pages 2-18 through 2-42).

The following solid waste management unit areas (SWMUAs), each containing one or more WMUs, have been identified at this facility.

SWMUA 1  
SWMUA 2  
SWMUA 3  
SWMUA 4

The following units were also identified and evaluated in the RFI:

Equipment Storage Area  
Ground Water Units  
Surface Water Units

E.4 Reserved

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

#### Historical Overview

The Permittee began implementation of the RFI required by Section VI of the U.S. EPA RCRA Part B Permit issued to the Permittee on September 8, 1988 by preparing the Facility Background Report that was submitted to U.S. EPA on May 3,

1989. Subsequent to preparation of the Facility Background Report, the Permittee submitted a report entitled "Investigative Analysis" to U.S. EPA on February 7, 1990. The "Investigative Analysis" report provided an assessment of the nature and extent of contamination of the Permittee's facility based on multimedia sampling and analytical data collected in and around SWMUs from 1986 through 1989. The "Investigative Analysis" also evaluated potential risks posed by site contamination to human health and the environment.

Subsequent to the "Investigative Analysis" report the Permittee submitted a proposed RFI Work Plan to U.S. EPA and Ohio EPA on September 25, 1991. The proposed RFI Work Plan included results of multimedia sampling and analysis from 1986 through 1991 and a site characterization based on this data. The proposed RFI Work Plan site characterization data constitute the initial phase of the RFI work at the facility and is often referred to as Phase 1. After responding to several Notices of Deficiency from U.S. EPA, the Permittee submitted a revised RFI Work Plan on November 3, 1993 which was approved by U.S. EPA on March 3, 1994.

The site characterization work completed under the November 3, 1993 work plan is often referred to as Phase II of the RFI. Characterization under the November 3, 1993 RFI Work Plan included multimedia sampling and analysis in and around SWMUs and the Equipment Storage Area (ESA), further sampling of site surface water bodies, further analysis of groundwater characteristics, groundwater modeling and an assessment of human health and ecological risk. The Permittee conducted the activities identified in the November 3, 1993 RFI Work Plan in 1994 and 1995 and submitted an RFI Report to U.S. EPA and Ohio EPA on December 7, 1995.

The December 7, 1995 RFI Report generated multiple review and response cycles in which U.S. EPA and Ohio EPA issued Notice of Deficiency comments (NODs) to the Permittee on the RFI Report and the Permittee responded to the NODs. These NODs and responses defined the final scope of the RFI, identified data gaps and identified improvements in the ecological risk assessment. To address U.S. EPA and Ohio EPA concerns, the Permittee prepared a Work Plan Addenda for U.S. EPA and Ohio EPA review which represented the third stage (Phase III) of RFI activities at the facility. On May 17, 1999 U.S. EPA issued a conditional partial approval of the Work Plan Addenda. Based on the partial approval, the Permittee conducted sediment and water sampling in the surface water bodies in 1999 and 2000.

On August 2, 2002, U.S. EPA approved the revised RFI Work Plan Addenda (dated July 2, 2002), associated Quality Assurance Project Plan (QAPP), and Preliminary Ecological Risk Assessment (PERA) Work Plan. On December 9-12, 2002, the Permittee completed the RFI Phase III sampling. The Permittee submitted the results of the December 2002 sampling and analysis and data validation for those samples to U.S. EPA and Ohio EPA by letter dated May 9, 2003.

Corrective Action oversight transitioned to Ohio EPA on the effective date of the Permittee's previous Ohio hazardous waste renewal permit, which was September 30, 2003. Ohio EPA accepted all documents and activities completed in accordance with workplans submitted and approved under U.S. EPA authority prior to the issuance of that permit.

In a letter dated March 30, 2004, Ohio EPA stated: "Ohio EPA is satisfied that Ross Incineration Services (RIS) has completed all required sampling and analysis work identified in the approved RFI work plan including Phases II and III of the work plan. The data package submitted to Ohio EPA meets the goals of the approved work plan and should be useable in completing the RFI Report for the RIS facility including facility characterization, evaluation and assessment of ecological and human health risk. There is no present need to collect additional RFI data." U.S. EPA had previously issued a similar letter on March 8, 2004.

RIS submitted a RCRA Facility Investigation (RFI) Risk Assessment Assumption Document (RAAD) dated December 1, 2004 to Ohio EPA which presented the objectives, rationale, and procedures for conducting the Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA) sections of the RFI Report. The RAAD reflected the NODs and associated responses for the December 1995 RFI Report.

In response to Ohio EPA comments, revisions to the RAAD were submitted by RIS in 2005 and 2006. By letter dated March 27, 2006, Ohio approved the RAAD as modified and with conditions.

Revising the 1995 RFI Report was not feasible because of the numerous revisions required by the NOD process and changes to the HHRA and ERA procedures since 1995. Therefore the HHRA and the ERA were completely recreated as described in the RAAD and the RFI Report was completely rewritten.

The RFI Report was submitted to Ohio EPA by RIS on April 21, 2009. The RFI report was revised by RIS on May 2, 2011 in response to Ohio EPA comments. The RFI report as revised was approved with certain conditions by Ohio EPA on June 9, 2011; it was subsequently resubmitted with the approval conditions incorporated in July 2011.

Four distinct SWMUAs (Solid Waste Management Unit Areas) and an Equipment Storage Area (ESA) were delineated to facilitate site characterization for the RFI. The four SWMUAs and the ESA incorporate RIS historical waste management activities, grouped by physical proximity. This reflects that various waste treatment and management practices have occurred at the facility since 1949, that some geographically overlapped, and that some sections of the site have had multiple uses.

As of the date of issuance of this permit, Ohio EPA is working on a draft Statement of Basis that is expected to propose that the Permittee implement additional corrective measures to further control risks identified in the RFI Report.

#### Newly Discovered Waste Management Units

In the event of a newly discovered unit, the Permittee must conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous wastes and hazardous constituents from any newly identified unit pursuant to Permit Conditions E.10 and E.11. The major tasks and required submittal dates are shown below

The Permittee must conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous wastes and hazardous constituents from any newly identified unit pursuant to Permit Condition E.3 and Permit Condition E.10. The major tasks and required submittal dates are shown below. The scope of work for each of the tasks is found in U.S. EPA's CAP.

#### (a) RFI Workplan

In the event of a newly discovered waste management unit the Permittee must submit a written RFI Workplan to Ohio EPA pursuant to a schedule 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 60 days of receipt of any Ohio EPA comments on the RFI Final Report, the Permittee must submit either an amended or new RFI Final Report that incorporates Ohio EPA's comments.
- (ii) Ohio EPA will approve or modify and approve, in writing, the amended or new RFI Final Report. The RFI Final Report, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved RFI Final Report must be authorized by Ohio EPA.

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

Based on the RFI Final Report or other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require (or the Permittee may propose) the development and implementation of an IM (this may include an IM Workplan) at any time during the life of the permit to mitigate or eliminate a threat to human health or the environment. The Permittee must implement the IM upon a time frame established by Ohio EPA.

#### E.7 Determination of No Further Action

##### (a) Permit Modification

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

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

##### (b) Periodic Monitoring

A determination of no further action shall not preclude Ohio EPA from requiring continued or periodic monitoring of air, soil, ground water, or

surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that a potential or an actual release of hazardous waste or constituents exists.

(c) Further Investigations

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

E.8 Corrective Measures Study (CMS)

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

(a) CMS Workplan

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

- (i) Within 60 days of receipt of any Ohio EPA comments, the Permittee must submit either an amended or new CMS Workplan that incorporates Ohio EPA's comments.
- (ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMS Workplan. The CMS Workplan, as approved or as modified and approved, must be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved CMS Workplan must be authorized by Ohio EPA.

(b) CMS Workplan Implementation

The Permittee must implement the CMS Workplan according to the terms

and schedule in the approved CMS Workplan.

(c) CMS Final Report

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

- (i) Within 60 days of receipt of any Ohio EPA comments, the Permittee must submit either an amended or new CMS Final Report that incorporates Ohio EPA's comments.
- (ii) Ohio EPA will approve or modify and approve, in writing, the amended or new CMS Final Report. The CMS Final Report, as approved or as modified and approved, must be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approved CMS Final Report must be authorized by Ohio EPA.

E.9 Corrective Measures Implementation (CMI)

The Corrective Measures selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the sources of releases so as to reduce or eliminate further releases of hazardous wastes (including hazardous constituents); and (4) comply with all applicable standards for management of wastes.

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

As of the date of issuance of this permit, Ohio EPA is working on a draft Statement of Basis that is expected to propose that the Permittee implement additional corrective measures to further control risks identified in the RFI Report. The draft Statement of Basis is expected to include a proposed Director's Initiated Permit Modification that identifies corrective measures that Ohio EPA believes appropriate to address the risks identified in the RFI Report.

(a) Permit Modification

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

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

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

Within 60 days after receiving approval of the CMI, the Permittee must provide financial assurance in the amount necessary to implement the corrective measure(s) as required by OAC Rule 3745-54-101 (B) and (C).

(c) Reserved

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

Further investigations or corrective measures will be established by Ohio EPA.

The Permittee must make such submittal in accordance with time frames established by Ohio EPA.

E.12 Completion of Corrective Action  
OAC Rule 3745-54-101

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

E.13 Documents Requiring Professional Engineer Stamp  
ORC Section 4733.01

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

Final Interim Measures Report

Corrective Measures Final Design

Corrective Measures Construction Completion Report

Corrective Measures Attainment of Groundwater Performance Standards Report

Corrective Measures Completion of Work Report

As such, the Permittee must ensure that these documents, as submitted to Ohio EPA, are stamped by a Professional Engineer licensed to practice in the State of Ohio.

**MODULE F - POST-CLOSURE CARE**

**F. POST-CLOSURE CARE**

Module Highlights

Surface impoundment SWI 7 contains hazardous waste placed in the impoundment prior to November 8, 1988 and subsequently stabilized as well as stabilized hazardous waste transferred from impoundments SWI 2 and SWI 6 during closure. No hazardous waste, other than hazardous waste transferred from SWI 2 and SWI 6 during closure, has been added to this impoundment since that date. Hazardous wastes managed in the unit included scrubber water and scrubber water sludge. This unit will require thirty (30) years of post-closure ground water monitoring and post-closure care.

**F.1 Unit Identification**

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

Type of Waste Unit	Unit No. or Other Designation	Maximum Waste Inventory	Description of Wastes Contained	Hazardous Waste No.	Year Post-closure began
Surface Impoundment closed with waste in place	Surface Impoundment 7 or SWI 7	16,552 yd <sup>3</sup> of stabilized sludge	Scrubber water and scrubber water sludge which is composed primarily of incinerator fly ash.	Various	2004

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

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

- (b) The Permittee must maintain and monitor the ground water monitoring system and comply with all other applicable requirements of OAC Rules 3745-54-90 through 3745-54-101 during the post-closure care period.
- (c) The Permittee must comply with the requirements for surface impoundments as follows:
  - (i) Maintain the integrity and effectiveness of the final cover, including making repairs to the final cover, as necessary, to correct the effects of settling, subsidence, erosion, and other events; and
  - (ii) Prevent run-on and run-off from otherwise damaging the final cover.
- (d) The Permittee must comply with all security requirements, as specified in the permit application.
- (e) The Permittee must not allow any use of the units designated in Permit Condition F.1 which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period.
- (f) The Permittee must implement the Post-Closure Plan in Section I of the permit application and the post-closure ground water monitoring program as detailed in Section E of the permit application and as modified by Condition B.35(a). All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan.

F.3 Inspections  
OAC Rule 3745-55-18(B)

The Permittee must inspect the components, structures, and equipment at the facility in accordance with the inspection schedule found in the Post-Closure Plan.

F.4 Notices and Certification  
OAC Rules 3745-55-19 and 3745-55-20

- (a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the Permittee must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the Permittee must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

- (b) Within 60 days after certification of closure of the first and the last hazardous waste disposal unit, the Permittee must:
- (i) Record, in accordance with Ohio law, a notation on the deed to the facility property, or on some other instrument that is normally examined during the title search, that will in perpetuity notify any potential purchaser of the property that:
    - (1) The land has been used to manage hazardous wastes;
    - (2) Its use is restricted under OAC Rules 3745-55-10 through 3745-55-20; and
    - (3) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility have been filed with the Director and the Lorain County zoning authority.
  - (ii) Submit a certification to the Director, signed by the Permittee, that he has recorded the notation specified in Permit Condition F.4(b)(i), including a copy of the document in which the notation has been placed.
- (c) If the Permittee wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, then he must request a modification to this permit in accordance with the applicable requirements in OAC Rules 3745-50-40 to 3745-50-66. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of OAC Rule 3745-55-17(C).

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

If the Permittee is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Director approve either:

- a) The removal of the notation on the deed to the facility property or other instrument normally examined during title search or,
  - b) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.
- (d) No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee must submit to

the Director, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Post-Closure Plan. The certification must be signed by the Permittee and an independent, qualified, registered professional engineer. Documentation supporting the independent, qualified, registered professional engineer's certification must be furnished to the Director upon request until the Director releases the Permittee from the financial assurance requirements for post-closure care under OAC Rule 3745-55-45.

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

The Permittee must maintain financial assurance during the post-closure care period and comply with all applicable requirements of OAC Rules 3745-55-40 through 3745-55-51.

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

The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with applicable requirements of OAC Rules 3745-50-40 to 3745-50-66, and must include a copy of the proposed amended Post-Closure Plan for approval by the Director. The Permittee must request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, there is a change in the expected year of final closure, or other events occur during the active life of the facility that affect the approved Post-Closure Plan. The Permittee must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post-Closure Plan.

## MODULE G - TREATMENT IN MISCELLANEOUS UNIT

### G. MODULE HIGHLIGHTS

The filter press treats scrubber water from the closed loop scrubber water system by physical removal of solids from the scrubber water feed stream. A damp cake of compressed solids is generated, dropped into a container, and transported to an offsite treatment or disposal facility. The liquid filtrate is recycled back to the closed loop scrubber water system. The filter press is located in the Filter Press Building. The filter press has a 2.4 cubic yard per batch capacity. Secondary containment for the filter press is provided by the Filter Press Building liner and sump system which has a total capacity of 22,493 gallons.

#### G.1 Reserved

#### G.2 Process Capacity/Annual Limitation

The Permittee must not exceed a maximum process treatment capacity of 111,000 gallons per day of scrubber water feed to the filter press.

#### G.3 Waste Identification OAC Rule 3745-57-90

The Permittee must treat in the permitted hazardous waste filter press only scrubber water and scrubber water sludges from blow-down operations of the closed loop scrubber water system carrying the hazardous waste codes specified in Section A of the permit application under the process codes of T04 and T03 and for which incineration is permissible under the restrictions and prohibitions in Table C1-1 of Section C of the permit application.

#### G.4 Assessment/Certification of Miscellaneous Unit OAC Rules 3745-57-91 and 3745-50-42(D)

The Permittee must keep on file at the facility a written statement by a qualified, registered professional engineer that attests that the filter press system was properly designed and installed. The written statement must also include the certification as required by OAC Rule 3745-50-42(D).

#### G.5 Containment System OAC Rule 3745-57-91

- (a) Secondary containment must be designed, installed and operated to prevent any migration of waste or accumulated liquid out of the system to soil, groundwater or surface water.

- (b) Secondary containment must be capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
- (c) The secondary containment must meet the requirements of OAC Rule 3745-55-93.

G.6 General Operating Requirements  
OAC Rule 3745-57-91

- (a) Hazardous waste or treatment reagents must not be placed in the filter press system if they could cause the filter press, its ancillary equipment, or the secondary containment system to rupture, leak, corrode or otherwise fail, as required by OAC Rule 3745-55-94.
- (b) The Permittee must use appropriate controls and practices to prevent spills or overflows from the filter press or containment system.
- (c) The filter press must be operated in accordance with the procedures and practices in Section D of the permit application, manufacturer's instructions and accepted industry practice.
- (d) The filter press must be maintained in accordance with manufacturer's recommendations and accepted industry practice.
- (e) The Permittee must comply with the requirements of OAC Rule 3745-55-96 if a leak or spill occurs in the filter press system.

G.7 Inspections  
OAC Rule 3745-57-92

- (a) The Permittee must inspect the hazardous waste filter press system daily in accordance with OAC Rule 3745-55-95 and Pages 26 and 27 of 49 of Appendix F-2 of Section F of the permit application.
- (b) The Permittee must document compliance with Condition G.7 (a) in an inspection log.

G.8 Response to Leaks or Spills and Disposition of Leaking or Unfit for Use Miscellaneous System  
OAC Rule 3745-57-92

A hazardous waste filter press system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately and the Permittee must satisfy the following requirements in accordance with OAC Rule 3745-55-96.

(a) Cessation of Use

The Permittee must immediately stop the flow of hazardous waste into the filter press system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of Waste From the Miscellaneous Unit or Secondary Containment System

(i) If the release was from the filter press system, the Permittee must, within twenty-four hours after detection of the leak, remove as much waste as necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the filter press system to be performed.

(ii) If the material released was to a secondary containment system, all released materials must be removed within twenty-four hours of the release to prevent harm to human health and the environment.

(c) Containment of Visible Releases to the Environment

The Permittee must immediately conduct a visual inspection of the release and, based upon that inspection, prevent further migration of the leak or spill to soil or surface water and remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) Notifications

Any release to the environment, except as provided in OAC Rule 3745-55-96 (D)(2), must be reported to the Director of Ohio EPA within twenty-four hours of detection.

(e) The Permittee must obtain a certification by an independent, qualified professional engineer that any major repair has been satisfactorily performed and the unit is capable of handling hazardous waste without release for the intended life of the system. The certification must be submitted to the Director of Ohio EPA within seven days after returning the filter press system to use.

G.9 Special Requirements

(a) Ignitable or Reactive Waste

The Permittee must not place ignitable or reactive waste in the filter press.

(b) Incompatible Waste

- (i) The Permittee must not place incompatible waste in the same filter press system or place hazardous waste in a filter press system that previously held an incompatible waste or material unless it is done in accordance with OAC Rule 3745-55-99.
- (ii) The Permittee must document compliance with Condition G.9 (b)(i) of this permit, as required by OAC Rule 3745-55-99, and place this documentation in the operating record.

G.10 Closure and Post-Closure Care  
OAC Rule 3745-57-91 and 3745-57-93

At closure of the filter press system, the Permittee must follow the procedures in Section I of the permit application in accordance with OAC Rules 3745-55-10 through 3745-55-40.

## MODULE I(A) - INCINERATION

### I(A).1 MODULE HIGHLIGHTS

The incineration unit includes the following components and systems:

- (a) Two enclosed combustion devices: the rotary kiln and the main chamber;
- (b) Material handling and feed systems for liquid and solid wastes;
- (c) An ash handling system for removing the ash remaining after the combustion of wastes which includes ash cooling, de-watering, separation of metal pieces and conveying ash into appropriate containers;
- (d) An air pollution control system for removal of acidic gases and particulate matter; and
- (e) Associated instrumentation and control systems.

Wastes are introduced into either the rotary kiln or the main chamber. Flue gas from the rotary kiln flows into the main chamber which functions as a secondary combustion chamber for the rotary kiln.

Flue gases pass from the main chamber to the air pollution control equipment which removes contaminants (primarily particulates and acid gases) contained in the flue gas prior to discharge through a stack to the atmosphere.

Stack emissions are monitored for carbon monoxide, oxygen and nitrogen oxides. Carbon monoxide is the primary indicator of combustion efficiency and destruction efficiency of hazardous constituents in the wastes.

Critical process parameters are continuously monitored and are accessible to the control room operator. The control system maintains key process parameters within specific ranges. The control system will automatically cut off waste feeds if certain process parameters fall outside of the allowable operating range.

Procedures in the facility's waste analysis plan and other sections of the permit application limit hazardous wastes fed to the incinerator to those that the facility is permitted to incinerate.

On September 30, 1999, U.S. EPA promulgated Maximum Achievable Control Technology ("MACT") standards for hazardous waste burning incinerators. These standards were promulgated under the joint authority of the Clean Air Act ("CAA") and RCRA. In the 1999 rule, U.S. EPA indicated that it chose to avoid imposing duplicative requirements under both RCRA and the CAA, where possible, by:

- Placing the standards only in the CAA implementing regulations at 40 CFR Part 63 Subpart EEE,
- Specifying that the analogous standards in the RCRA regulations no longer apply once a facility demonstrates compliance with the hazardous waste combustor ("HWC") MACT standards in Subpart EEE, and
- Requiring the HWC MACT standards to be incorporated into operating permits issued under Title V of the CAA rather than in RCRA permits.

Since 1999, U.S EPA has issued several technical corrections and amendments to the HWC MACT standards to improve their implementation. This includes, but is not limited to, the final replacement HWC MACT Standards which established a compliance date of October 14, 2008 for new and existing sources. The Permittee submitted a Notification of Compliance with the final replacement HWC MACT Standards on October 13, 2008 to Ohio EPA, and separately requested that such standards be incorporated into its CAA Title V Permit, where applicable. RCRA conditions, limits and restrictions which have been superseded by equivalent or more stringent requirements under the HWC MACT standards are no longer included in this permit or the associated permit application.

If the Director of Ohio EPA concludes, based on one or more of the factors under OAC Rule 3745-50-40(I)(1) to (I)(1)(i) that compliance with the standards of 40 CFR Part 63 subpart EEE alone may not be protective of human health or the environment, the Director will require the additional information or assessment(s) necessary to determine whether additional controls are necessary to ensure protection of human health and the environment.

I(A).2 Identification Criteria for Permitted and Prohibited Waste  
OAC Rule 3745-57-44

The Permittee may incinerate the following hazardous wastes, as specified in 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 must only incinerate hazardous wastes meeting the following criteria:
  - (i) The Permittee must not feed any hazardous waste whose current Ohio EPA hazardous waste code number does not appear in Part A of the permit application under the process code of T03.
  - (ii) The Permittee must not feed any hazardous waste for which incineration would be inconsistent with the restrictions and prohibitions in Table C1-1 of Section C of the permit application.

- (b) Throughout operation, the Permittee must conduct sufficient analysis in accordance with the Waste Analysis Plan to verify that waste fed to the incinerator is within the physical and chemical composition limits specified in this permit.
- (c) The point of injection or feed for all hazardous waste streams fed into the incinerator must be consistent with Table C1-1 of Section C of the permit application.
- (d) The Permittee must not feed wastes through a second main chamber aerosol can feeder until and unless it is modified to the same design and operating standards as the former first main chamber aerosol can feeder (subsequently relocated for use as the kiln aerosol can feeder) and Ohio EPA has approved these modifications.

I(A).3 Construction, Instrumentation, and Operational Performance Requirements  
OAC Rule 3745-57-45

Wastes described in permit Condition I(A).2. may be fed to the incinerator only in compliance with permit Conditions I(A).3(a) and (b).

- (a) Feed Restrictions for the Side Door and Direct Feed Locations
  - (i) The Permittee must follow the procedures and practices identified in Sections C, D and F of the permit application for determining the compatibility of waste materials being fed to the side door and tanker and container direct feed mechanisms of the Main Chamber.
  - (ii) The Permittee must follow the procedures and practices identified in section D-5c (2) of the permit application when feeding waste into the Main Chamber through the side door feed mechanism.
  - (iii) The Permittee must follow the procedures and practices identified in Section D of the permit application for operation of the tanker and drum direct feed systems, the side door feed system and the direct feed areas.
  - (iv) The Permittee must comply with the following general operating requirements for operation of the direct feed systems and the direct feed areas:

The direct transfer of hazardous waste to the incinerator must be conducted so that it does not:

- (1) Generate extreme heat or pressure, fire, explosion or violent reaction;

- (2) Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosion;
- (3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;
- (4) Damage the structural integrity of the container or direct transfer equipment containing the waste; or
- (5) Threaten human health or the environment.

The Permittee must conduct direct feed transfer only in areas with spill containment as indicated in Sections D and F of the permit application.

The Permittee must conduct inspections of the direct feed area in accordance with Sections D and F of the permit application, maintain records of these inspections in the operating record of the facility and make them available for review for at least three years from the date of the inspection.

- (v) The Permittee must not feed empty containers through the side door feed mechanism unless the provisions applicable to empty containers in the Side Door Implementation Plan dated November 23, 1998, which plan is included in U.S. EPA's Administrative Orders dated December 12, 1998, are met.
- (b) The Permittee must comply with all the applicable requirements for restricted wastes and treatment residues (ash, scrubber water, etc.) specified in the rules found in OAC Chapter 3745-270.

I(A).4 Inspection Requirements  
OAC Rule 3745-57-47

The Permittee must inspect the incineration unit in accordance with the Inspection Schedule in Section F of the permit application and must complete the following as part of these inspections:

- (a) The Permittee must thoroughly visually inspect the incinerator and associated equipment (including pumps, valves, conveyors, pipes, etc.) for leaks, spills, fugitive emissions, and signs of tampering, as specified in Pages 16 and 17 of 49 in Appendix F-2 of Section F of the permit application.

- (b) The Permittee must conduct all other inspections applicable to the incineration unit as specified in Appendix F-2 of Section F of the permit application.

I(A).5 Monitoring Requirements  
OAC Rule 3745-57-47

- (a) The Permittee must log the following data while incinerating hazardous waste:
  - (i) Quantities of chemicals used in conjunction with air pollution control equipment in tons/month of caustic used or equivalent.
  - (ii) Quantities of ash and air pollution control sludges generated in tons/month.

I(A).6 Incineration Residuals

Unless the Permittee can show otherwise per OAC Rule 3745-51-03(D), residue from the incinerator is hazardous waste, the Permittee is a generator and must manage this hazardous waste according to the Ohio hazardous waste regulations. The Permittee must manage residue from the incinerator in accordance with the applicable practices and procedures in Sections C and D of the permit application.

I(A).7 Closure  
OAC Rule 3745-57-51

At closure of the incinerator, the Permittee must follow the procedures in the Closure Plan in Section I of the permit application.

I(A).8 Recordkeeping

The Permittee must record and maintain, in the operating record for this facility, all monitoring and inspection data compiled under the requirements of this permit module.

I(A).9 Reserved

## MODULE J - GROUND WATER MONITORING

### J. GROUND WATER MONITORING

This module addresses the ground water monitoring program associated with Surface Impoundment SWI 7 at Ross Incineration Services. This unit is being monitored during the post-closure care period that began in 2004. Surface Impoundment SWI 7 was closed with waste-in-place and is subject to post-closure care ground water monitoring.

At the time of issuance of this permit, Ohio EPA is preparing a draft Statement of Basis for corrective measures pursuant to the corrective action program. The draft Statement of Basis is expected to propose significant changes to the Permittee's ground water monitoring program.

#### J.1. Applicability

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

- (a) The Permittee must comply with the applicable requirements in OAC Rules 3745-54-90 through 3745-54-100 for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer for the following unit:

-Surface Impoundment SWI 7, which was closed with waste in place.

- (b) OAC Rules 3745-54-90 through 3745-54-100 apply during the active life, which includes the closure period, of the above-mentioned regulated units. After closure of each regulated unit, OAC Rules 3745-54-90 through 3745-54-100:

(i) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

(ii) Apply during the post-closure care period under OAC Rule 3745-55-17 if the Permittee is conducting a detection monitoring program under OAC Rule 3745-54-98; or

(iii) Apply during the compliance period under OAC Rule 3745-54-96 if the Permittee is conducting a compliance monitoring program under OAC Rule 3745-54-99 or a corrective action program under OAC Rule 3745-54-100.

- (c) The Permittee is subject to OAC Rules 3745-54-90 through 3745-54-100 and must conduct a monitoring and response program as follows:

The Permittee must conduct a detection monitoring program under OAC Rule 3745-54-98.

J.2. Reserved

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

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

- (a) The Permittee's ground water monitoring system must consist of a sufficient number of wells, installed and screened at appropriate locations and depths to yield ground water samples from the Berea Sandstone and Shallow Till Zone which together constitute the uppermost aquifer. The samples must:
- (i) Represent the quality of background water that has not been affected by leakage from the regulated unit;
  - (ii) Represent the quality of ground water passing the point of compliance, which is indicated on Figure E-1 in Section E of the Permit Application;
  - (iii) Allow for the detection and measurement of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer; and
  - (iv) If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the ground water in the uppermost aquifer.
- (b) The monitoring system consists of the ground water wells as specified on Figure E-1 in Section E in the Permit Application and in conformance with the following list:

Zone Monitored	Background Wells	Downgradient Wells
Till		MW-11B, MW-21B, MW-23B, MW-32, MW-33
Berea Sandstone	MW-2 MW-5	MW-11A MW-24A MW-25A

Till wells are evaluated in an intra-well basis as flow is local and radial; therefore no background till wells are monitored.

- (c) Wells identified in Permit Condition J.3(b) must be cased in a manner that maintains the integrity of the monitoring well bore hole and complies with the detailed plans and specifications presented in Appendix E-1 Section 2.2.1 and Appendix E-2 of Section E of the Permit Application. The casing must be screened and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space above the sampling depth must be sealed to prevent contamination of samples and the ground water.

Appendix E-2 of Section E of the Permit Application contains ground water monitoring well construction diagrams which illustrate compliance with OAC Rule 3745-54-97(A) to (C). Appendix E-2 of Section E of the Permit Application also contains the surveyed ground surface elevation for each well.

- (d) The Permittee must remove or replace any monitoring well in Permit Condition J.3(b) in accordance with Appendix E-1 Section 2.2.3 and the OAC Rule 3745-50-51 permit modification process. Each change must be accompanied by a revised map as specified on Figure E-1 in Section E of the permit application as referenced in Permit Condition J.3(b).
- (e) Whenever any of the wells specified in Permit Condition J.3(b) are replaced, the Permittee must demonstrate to Ohio EPA that the ground water quality at the replacement well meets the criteria in Permit Condition J.3(a) within a two year period of the date of replacement using means appropriate to the reason for replacement. The sampling schedule for new wells is outlined in Section E-3.2 of the Permit Application.
- (f) All wells removed or replaced in accordance with Permit Condition J.3(e) shall be plugged and abandoned in accordance with Chapter 9 of the Ohio EPA Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring (February 2009). Well plugging and abandonment methods, certification and justification must be submitted to the Director within thirty (30) days from the date the well was removed from the monitoring program.

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

- (a) The Permittee must conduct a ground water monitoring program per Section E and Section 5.0 of Appendix E-1 of the Permit Application. This program includes consistent sampling and analysis procedures designed to ensure monitoring results that provide a reliable indication of ground water quality below the waste management area and are in compliance with OAC Rule 3745-54-97(D).

- (b) The Permittee's ground water monitoring program per Section E and Section 5.0 Appendix E-1 of the Permit Application includes sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples in compliance with OAC Rule 3745-54-97(E).
- (c) Field and analytical data must be validated in accordance with the procedures specified in Section 7.0 of Appendix E-1 and Appendix E-6 of the Permit Application.

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

The Permittee must determine the ground water surface elevation at each well identified in the table in Permit Condition J.3(b) each time ground water is sampled using the methods in Section E-8 and Section 4.2.1 of Appendix E-1 of the Permit Application.

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

Data on each hazardous constituent specified in Permit Conditions J.2(a) or J.9(a) will be collected from background wells and wells at the compliance point(s). The sampling procedure and interval for each constituent is described in Section E of the Permit Application.

- (a) The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles.
- (b) The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected.
- (c) Background data must be updated as necessary in accordance with Section 2.0 of Appendix E-3 of the Permit Application to provide an accurate representation of background ground water quality. New or revised background values must be established in the permit through the permit modification process in OAC Rule 3745-50-51.

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

The Permittee must use the following statistical procedures in evaluating ground water monitoring results for each hazardous constituent in Permit Condition J.2(a) or J.9(a) in each well in Permit Condition J.3(b) to identify statistically significant evidence of contamination, the exceedance of a concentration limit, and/or the effectiveness of corrective action:

- (a) For those constituents for which background values have not been collected and established at the time of Permit Application, the Permittee must choose and submit to Ohio EPA the appropriate statistical method within 45 days after the receipt of the last background sampling event data through the permit modification process in OAC Rule 3745-50-51.

For those constituents for which background values have been collected, the Permittee must conduct statistical procedures as presented in Appendix E-3 and Appendix E-4 of the Permit Application.

- (b) The Permittee's statistical procedures must be protective of human health and the environment, provide reasonable confidence that the migration of hazardous constituents from a regulated unit into and through the aquifer will be indicated, and be able to determine whether such leakage of hazardous constituents into the ground water exceeds specified concentration limits. The statistical procedures must comply with the following performance standards:
- (i) The statistical evaluation of ground water monitoring data must be conducted separately for each hazardous constituent specified in Permit Condition J.2(a) or J.9(a) in each well.
- (ii) The statistical method must be appropriate for the distribution of the data used to establish background or concentration limits. If the distribution for the constituents differs, more than one statistical method may be needed.
- (iii) The statistical method must provide a reasonable balance between the probability of falsely identifying a non-contaminating and/or exceeding unit and the probability of failing to identify a contaminating and/or exceeding regulated unit as detailed in OAC Rule 3745-54-97(I)(2).
- (iv) If a control chart approach is used, the specific type of control chart and its associated parameter values must be proposed by the Permittee and approved in the permit.

- (v) If a tolerance or prediction interval procedure is used, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the Permittee and approved in the permit. These parameters must be determined after considering the number of samples in the background data base, the data distribution, and the range of concentration values for each constituent of concern.
- (vi) The statistical method must account for data below the limit of detection with one or more statistical procedures. Any practical quantitation limit (PQL) approved in the permit that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
- (vii) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

J.8. Operating Record and Reporting

OAC Rules 3745-54-73, 3745-54-75, 3745-54-77 and 3745-54-97(J)

(a) Operating Record

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

- (i) Ground water monitoring data collected in accordance with this permit including actual levels of constituents.
- (ii) The laboratory results from each of the wells and their associated qualifiers including the laboratory sheets for the full volatile and semi-volatile analyses (must include method codes, detection limits, and units of measurement);
- (iii) The date each well was sampled (tabulated);
- (iv) The date, time, and identification of all blanks and duplicates;
- (v) Any field log documentation of deviation from the procedures in Section E of the permit application, including documentation of parameter omissions during the sampling event;

- (vi) The date the Permittee received the results from the laboratory;
  - (vii) The date the owner or operator completed their review of the analytical laboratory's verification of the accuracy and precision of the analytical data and determined its quality.
  - (viii) The results of the data validation review per Permit Condition J.8(a)(vii) including: report completeness, chain of custody, sample receipt form, signed statement of validity, technical holding time review, data qualifiers including their definitions, dilutions, blank data, spikes, spike recovery %, surrogate recovery, and an explanation of any rejected results;
  - (ix) Results of all blanks and duplicates (trip, field, equipment, and method);
  - (x) Results of the field parameters;
  - (xi) The statistical evaluation of the data (must include all computations, results of statistical tests, and date the statistical evaluation was completed);
  - (xii) Any change in well status (i.e., going from unaffected to affected status and vice versa);
  - (xiii) Ground water surface elevations taken at the time of sampling each well;
  - (xiv) Data and results of the annual determination of the ground water flow rate and direction, including potentiometric maps;
  - (xv) The results of the last three years of all inspections required under OAC Rule 3745-54-15(D) related to ground water monitoring and equipment as required under OAC Rule 3745-54-73(B)(5).
  - (xvi) Reserved.
- (b) Annual, Semi-Annual & Other Periodic Required Reporting
- (i) Required Annual Reporting

The Permittee must submit the Supplementary Annual Report for Final Standards Ground Water Monitoring Information (the annual report) to the Director by March 1<sup>st</sup> of the following year. The annual reports must reference the titles and dates of any other periodic

reports required by the permit or any updates to those reports, but generally do not need to include duplicates of hard copies previously submitted.

The annual reports must include, at a minimum, the analytical results required by Permit Conditions J.9, J.10, or J.11, the ground water elevation data required by Permit Condition J.5 and J.8(a)(xiii), and the results of any statistical analyses required by Permit Condition J.9, J.10, or J.11. In addition, a copy on disk of all ground water and blank data must be submitted electronically in the format supplied by the Director, a hard copy of well-specific information (location (latitude and longitude), depth, construction, etc.) for any new/replacement wells, and any other information specified in the instructions for the annual report not addressed in this Permit Condition must be submitted in accordance with OAC Rule 3745-54- 97(J).

- (ii) Reserved
- (iii) Other Reports  
OAC Rule 3745-54-77(C)

The Permittee must comply with any reporting requirements that become necessary under Permit Conditions J.9, J.10, or J.11 in accordance with the schedules covered by that permit condition and as required by OAC Rule 3745-54-77(C).

J.9. Detection Monitoring Program  
OAC Rule 3745-54-98

- (a) The Permittee must establish and implement a detection ground water monitoring program as required by OAC Rule 3745-54-98.
- (b) The Permittee must determine concentrations of the parameters in the following table that provide a reliable indication of the presence of hazardous constituents in ground water at each monitoring well listed in Permit Condition J.3(b) annually during the post-closure care period. These concentrations will be compared to the background concentrations set forth below as per Permit Conditions J.6 and J.7.

Ground Water Parameters per GWMP	
Antimony	Mercury
Arsenic	Nickel
Barium	Selenium
Beryllium	Silver
Cadmium	Thallium
Chromium	Tin
Cobalt	Vanadium
Copper	Zinc
Lead	TOC
	TOX

In addition to the constituents listed above, the Permittee must monitor the following ground water quality and field parameters:

pH, Specific Conductance, and temperature.

- (c) The Permittee's ground water monitoring program must include collection, preservation, and analysis of samples for the ground water parameters listed in the table in Condition J.9 (b) pursuant to Permit Conditions J.4, J.5, and J.6. The Permittee must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under Permit Conditions J.7 and J.8.
- (d) Statistical analysis shall be conducted at least annually to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in Permit Condition J.9(b).
- (e) The Permittee must determine the ground water flow rate and direction in the uppermost aquifer at least annually using the procedures specified in Section E of the Permit Application.
- (f) The Permittee must determine whether there is evidence of contamination for any chemical parameter or hazardous constituent specified in Permit Condition J.9(b) at least annually within 45 days after completion of each sampling event. In determining whether statistically significant evidence of contamination exists, the Permittee must use the methods specified in Permit Condition J.7 to compare data collected at the compliance point(s) to the background ground water quality data.
  - (i) In addition to the parameters in Permit Condition J.9(b), the Permittee shall collect samples for chloride from all wells listed in Permit Condition J.3(b) during each sampling event.

- (ii) TOX specific: The Permittee shall use an approved statistical procedure for determining whether a statistically significant TOX increase has occurred. If a statistical increase in TOX is confirmed, then the Permittee shall have the laboratory analyze the chloride sample taken from the affected well or wells; otherwise chloride samples will not be analyzed. The Permittee shall use the chloride concentration data to evaluate the potential for chloride interference in the analytical methodology.
- (iii) TOX specific: If elevated chloride concentrations are found to act as a laboratory interfering agent, then no further response will be necessary by the Permittee. However, if chloride is determined not to be an interfering agent, the Permittee shall immediately resample the affected well(s) for TOX and chloride, and reanalyze per Permit Condition J.9(f)(ii).
- (iv) TOX specific: If following the re-sample, TOX resample results are not statistically significant, the associated chloride re-sample will not be analyzed and the Permittee will remain in detection monitoring. If TOX results are statistically significant in the re-sample, the chloride sample will be analyzed.
- (v) TOX specific: If following the re-sample, elevated chloride concentrations are found to act as a laboratory interfering agent, then no further response will be necessary by the Permittee. However, if chloride is determined not to be an interfering agent, the Permittee shall sample and analyze the affected well(s) for VOCs (SW 846 Method 8260B), SVOCs (SW 846 Method 8270), and chloride to evaluate any potential impact to ground water from the land based unit.
- (vi) TOC Specific: The Permittee shall use an approved statistical procedure for determining whether a statistically significant TOC increase has occurred. If a statistical increase in TOC is confirmed through a resample, then the Permittee shall immediately sample and analyze the affected well(s) for VOCs (SW 846 Method 8260B) and SVOCs (SW 846 Method 8270) to evaluate any potential impact to ground water from the land based unit. If the resample for TOC is not confirmed to be statistically significant, the Permittee will remain in detection monitoring.
- (vii) If a specific metal concentration is statistically significant for a well or wells, the Permittee shall immediately resample the affected well or wells for the specific metal.

- (viii) If the results of the initial sampling for metals, VOCs or SVOCs indicate contamination, then the Permittee shall follow the response requirements in Permit Condition J.9(g). If the results are non-detect for the VOCs/SVOCs or do not indicate a statistically significant difference for the metals, then the Permittee may remain in Detection Monitoring.
- (g) If the Permittee determines, pursuant to Permit Condition J.9(f), that statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in Permit Condition J.9(b) has been confirmed at any monitoring well at the compliance point, then the Permittee must:
  - (i) Notify the Director of this finding in writing within seven (7) days of that determination. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination, the corresponding analytical results, and the well(s) with the confirmed evidence;
  - (ii) For any hazardous constituent found in the analysis pursuant to Permit Condition J.9(f)(ii), the Permittee may re-sample the affected wells within 30 days of the notification to the Director pursuant to condition J.9(g)(i) and repeat the analysis for those constituents detected. If the results of the analysis indicate that the specific VOCs or SVOCs are not detected or that a statistically significant increase in concentration for a specific metal has not occurred, then the Permittee shall remain in detection monitoring. If the results of the second analysis confirm the initial results, or if the Permittee elects not to re-sample, then these constituents form the basis for compliance monitoring.
  - (iii) Within 90 days of determining a statistically significant increase, submit to the Director an application for a permit modification to establish a compliance monitoring program meeting the requirements of OAC Rule 3745-54-99. The application must include the following information:
    - (1) An identification of the concentration of any hazardous constituent detected in the ground water at each monitoring well at the point of compliance or between the compliance point and the downgradient facility boundary;
    - (2) Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of compliance monitoring under OAC Rule 3745-54-99 including

- wells necessary to meet OAC Rule 3745-54-91(A)(3) with a visual representation of the point of compliance required by OAC Rule 3745-54-95;
- (3) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of OAC Rule 3745-54-99.
  - (4) For each hazardous constituent detected at the compliance point or between the compliance point and the downgradient property boundary, a proposed concentration limit under OAC Rule 3745-54-94(A)(1) or (A)(2), or a notice of intent to seek an alternate concentration limit for a hazardous constituent under OAC Rule 3745-54-94(B).
  - (5) The compliance period as defined in OAC Rule 3745-54-96.
  - (6) A statement that the Permittee will begin sampling and analyzing for the new constituents at the next regularly scheduled sampling event following the event in which they were determined to be present.
- (iv) Unless one of the exceptions in OAC 3745-54-98(G)(5)(b) is applicable, within 180 days of determining a statistically significant increase, submit to the Director:
- (1) All data necessary to satisfactorily justify an alternate concentration limit under OAC Rule 3745-54-94(B); and
  - (2) An engineering feasibility plan (EFP) for a corrective action program necessary to meet the requirements of OAC Rule 3745-54-100.
- (v) If the Permittee determines, pursuant to Permit Condition J.9, that there is a statistically significant difference for chemical parameters or hazardous constituents specified in Permit Condition J.9(b) at any monitoring well at the compliance point or between the compliance point and the downgradient property boundary, a demonstration may be submitted to the Agency that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, statistical evaluation, or natural variation in the ground water.

The Permittee may make this demonstration in addition to, or in lieu of, submitting a permit modification application for a compliance ground water monitoring program under OAC Rule 3745-54-99. However, the Permittee is not relieved of the requirement to submit a permit modification application within ninety (90) days unless the demonstration made under this Permit Condition is deemed successful by the Agency prior to the ninety (90) day time limit.

In such cases, the Permittee must:

- (1) Notify the Director in writing within seven (7) days of determining a statistically significant evidence of contamination at the compliance point or between the compliance point and the downgradient property boundary that such a demonstration will be made;
  - (2) Within 90 days of determining a statistically significant increase, submit a report to the Director which successfully demonstrates that a source other than a regulated unit caused the contamination or that the increase resulted from error in sampling, analysis, or evaluation;
  - (3) Within 90 days of determining a statistically significant increase, submit to the Director an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility; and
  - (4) Continue to monitor in accordance with the approved detection monitoring program established under this permit.
- (h) If the Permittee determines the detection monitoring program no longer satisfies the requirements of OAC Rule 3745-54-98, the Permittee must, within ninety (90) days of the determination, submit an application for a permit modification per OAC Rule 3745-50-51 to make any appropriate changes to the program.

J.10. Reserved

J.11. Reserved

END OF PERMIT CONDITIONS