ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

December 2, 2009

Certified Mail
7004 2510 0001 8615 8596

Veolia ES Technical Solutions, L.L.C.
Attn: Doug Harris
7 Mobile Avenue
Sauget, Illinois 62201-1069

Re: 1631210009 – St. Clair County
Veolia ES Tech
ILD098642424
Log No. B-29R
RCRA Part B Permit File

Dear Mr. Harris:

Enclosed is a renewal RCRA Hazardous Waste Management Part B Permit. Two draft renewal permits were previously made available to the public on June 3, 2003 and July 24, 2008. Changes between the draft July 24, 2008 permit and this final permit are identified in Attachment 1 to this letter. The draft permit is based on the administrative record contained in the Illinois EPA's files. The contents of the administrative record are described in 35 Ill. Adm. Code Section 705.144.

This permit is divided into two permits. A RCRA permit issued by IEPA and a Hazardous waste Management Permit issued by USEPA. The USEPA permit generally contains only those provisions and conditions raised pursuant to the Hazardous Solid Waste Amendments of 1984 to RCRA (HSWA). The IEPA permit also enforces portions of HSWA where IEPA has authority to do so. Read both documents carefully. Failure to meet any portion of either permit could result in civil and/or criminal penalties. The USEPA permit is being mailed separately.

Work required by this permit, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This permit does not relieve anyone from compliance with the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Within 35 days after the notification of a final permit decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not

Exhibit A

to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

If you have any questions concerning this permit, please contact Mary Riegle at 217/524-3329. Questions concerning the USEPA portion of this draft permit should be directed to Mr. Blough at 312/886-2967.

Sincerely,

Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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Attachment: Attachment 1 Changes between Draft Permit and Final Permit

cc: Harriet Croke, USEPA

Attachment 1
Changes Between Draft Permit dated July 24, 2008 and Final Permit

1. Condition II(B)(3) was clarified by adding provisions for rejected wastes.

2. Condition II(K)(7) was modified to address ash storage for greater than 90 days.

3. Condition II(K)(9) and II(K)(10) were removed.

4. Condition III(D)(4) was modified to address storage of rejected loads and loads awaiting sampling results.

5. Condition III(F)(2)(b) was modified to address daily inspections of ancillary equipment.

6. Condition VI(2) was added to address dioxin concerns raised in the public comments.

7. Conditions V(6) and V(7) were re-numbered to Conditions VI(3) and VI(4)

8. Condition IV(A)(4) now identifies specific wastes that are not permitted for incineration.

9. Condition IV(A)(10)(i) was changed to require certain testing once a year rather than twice a year.

10. Condition IV(A)(10)(iii) was modified by adding the phrase "in its final form as feed for incineration."

11. Condition IV(A)(10)(iv) was changed to include all fuels other than natural gas.

12. Condition IV(A)(10)(vii)(1) was modified by adding the phrase "except those that are packaged in numerous small containers or are unknowns (such as having no labels or other identification)."

13. Condition IV(A)(10)(vii)(3) was modified by removing the phrase " or are packaged as specified by the Permittee" and adding "except those that are packaged in numerous small containers or are unknowns (such as having no labels or other identification)."

14. Condition IV(A)(10)(vii)(4) now excludes unknown wastes.

15. Condition IV(A)(10(vii)(5) was modified by adding "and are handled unopened until destroyed in the incinerator."

16. Condition IV(A)(10(vii)(6) was modified by adding "that are handled unopened until destroyed in the incinerator."

17. The mandatory analysis for multi-phase waste streams in Condition V(6) was clarified.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PERMIT

IEPA #1631210009
USEPA ILD #098642424
Veolia ES Technical Solutions, L.L.C.
Permit #29R
Part B Log No. B-29R
RCRA Permit

Issue Date: December 2, 2009
Effective Date: January 6, 2010
Expiration Date: December 2, 2019

Veolia ES Technical Solutions, L.L.C.
Attention: Mr. Tom Bramlette
7 Mobile Avenue
Sauget, Illinois 62201-1069

A RCRA Part B renewal permit is hereby granted pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to Veolia ES Technical Solutions, L.L.C. to construct, maintain and operate Veolia ES Technical Solutions, L.L.C., a waste management facility involved in the storage treatment, and incineration of hazardous waste. Veolia ES Technical Solutions, L.L.C. is located at 7 Mobile Avenue, Sauget, Illinois 62201-1069.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and the applicable regulations contained in 35 Ill. Adm. Code Parts 702, 703, 705 and 720 through 729. This permit consists of the conditions contained herein including those in any attachments and contains 154 pages including Attachments A through J.

If you have any further questions regarding this permit, please contact Mary Riegle at 217/524-3329.

Sincerely,

Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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RCRA HAZARDOUS WASTE MANAGEMENT PERMIT Log No. B-29R

Veolia ES Technical Solutions, L.L.C. L.L.C.

Sauget, Illinois

IEPA NO. 1631210009
USEPA NO. ILD098642424

Veolia ES Technical Solutions, L.L.C.
RCRA Permit
ILD098642424

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SECTION I. GENERAL PROVISIONS

A. GENERAL FACILITY DESCRIPTION

Veolia ES Technical Solutions, L.L.C. (Veolia) is located in Sauget, Illinois and is a division of Veolia ES Technical Solutions, L.L.C. L.L.C. The facility is designed to receive hazardous and nonhazardous wastes for repackaging, bulking and incineration at this facility. These wastes may be either solids, liquids, sludges or gases, and received in tank trucks, rail cars, or containers.

The facility currently includes container storage units, tank farms, drum decant area, material processing areas, 2 fixed hearth incinerators and a rotary kiln incinerator. In addition, the facility is equipped with a complete analytical laboratory capable of performing all analytical testing required by this permit.

Proposed additions to the site include added capacity to Tank Farm #3.

Total capacities at the facility:

Container Storage – 1,062,789 gallons
Tank Storage -- 656,724 gallons
Fixed Hearth Incinerator No. 2 -- 16 million BTU/hr
Fixed Hearth Incinerator No. 3 -- 16 million BTU/hr
Transportable Rotary Kiln Incinerator No. 4 -- 50 million BTU/hr
Misc. Unit – Glovebox Emission Control System – 3300 gal/day

All container storage areas are inside buildings with secondary containment. 55 gallon containers or larger of ignitable wastes may not be stacked. All tank farms will be located within concrete bermed areas capable of containing the contents of the largest tank in the area plus the water from a 24-hour 25-year storm. All incinerators are equipped with pollution control systems capable of meeting the performance standards required by 35 I.A.C. Part 724 Subpart O.

B. DESIGN AND CONSTRUCTION REQUIREMENTS

1. Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

2. The Permittee shall construct all future waste management units in accordance with the approved designs and specifications that are included in the approved permit

application. Modifications to the units including changes to physical dimensions or materials of construction are subject to a permit modification. Changes in structural or foundation design that will not increase the possibility of fire, explosion or any unplanned or nonsudden release of hazardous waste constituents, which are deemed necessary by the Permittee and certified by Illinois license structural engineer of record are not subject to a permit modification, but must be noted on the as-built drawings and the rationale for those deviations must be provided in narrative form. After completion of construction of each future waste management unit but prior to operation, the Permittee shall submit final as-built drawings, a certification pursuant to 35 Ill. Adm. Code 702.126(d) by both the owner/operator and an independent professional engineer registered in the State of Illinois that the equipment has been constructed in accordance with the approved permit application and the as-built diagrams and the narrative report to the Director and the Administrator as part of the Construction Certification Document.

All technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois. These documents must be submitted to the Illinois EPA Division of Land Pollution Control's Permit Section within 6 months of the effective date of this permit.

C. APPROVED PERMIT APPLICATION

The facility received its initial permit on March 31, 1988. This permit expired on May 5, 1998. An application for renewal was submitted November, 1997. The draft permit is based on the application for renewal.

The application for permit renewal was initially submitted in November 1997. Due to numerous revisions, the Approved Permit Application shall consist of the most recent submissions which were dated February 19, 1998, August 30, 1999, January 7, 2000, November 16, 2000 and January 26, 2001, June 26, 2002, May 30, 2003, January 16, 2004 and October 30, 2007 and other plans to be submitted by Veolia in accordance with this permit and approved by Illinois EPA. Where a requirement of this permit is inconsistent with the application, the permit shall control.

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SECTION II. CONTAINERS

A. SUMMARY

All containers shall be stored or staged in the areas listed in Condition B(2) below.

B. WASTE IDENTIFICATION

1. The storage of all hazardous waste containers shall be located in approved storage area(s). The location of each storage area is shown in drawings approved in the application.

2. The Permittee may only store the wastes listed in Attachment E in containers in the following units in accordance with the following maximum volumes:

   Veolia has four drum storage units having a maximum capacity to store a total of 752,290 gallon drum equivalents of waste. Drum capacities for each unit as follows:

Drum Storage Unit No. 1	61,490 gallons
Drum Storage Unit No. 2	90,640 gallons
Drum Storage Unit No. 3	563,200 gallons
Drum Storage Unit No. 6	36,960 gallons
	752,290 gallons

   In addition to the four drum storage units, the Permittee is authorized to store containers in the following units:

Roll-off Storage Building	96,960 gallons
Drum Decant Area	16,830 gallons
Material Processing Area 1	15,950 gallons
Material Processing Area 2	4,125 gallons
Lab Pack Repackaging Building 2B	7,700 gallons
Direct Inject System at Inc. No. 2 & 3	77,920 gallons
Direct Inject System at Inc. No. 4	60,214 gallons
Trailer storage pad	30,800 gallons

3. The Permittee is prohibited from storing waste that is identified in Section VI of this permit in the permitted units identified in Condition II.B.2 except as needed in cases when waste must be rejected to the generator or an alternate facility.

4. The Permittee may temporarily store wastes awaiting incineration in the following staging areas: specialty feeder at Unit 2, compressed gas cylinder feed system at Unit

2, Fume Hood Specialty Feed System at Unit 3 and hooded feeders at Unit 3. The containers and all non-RCRA empty containers must be returned to permitted storage within 1 shift (12 hours) staging areas.

C. CONDITION OF CONTAINERS -- 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 this container to a container that is in good condition, an overpack or manage the waste in accordance with the Approved Permit Application.

D. COMPATIBILITY OF WASTE WITH CONTAINERS -- The Permittee must use containers made of or lined with material 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.

E. MANAGEMENT OF CONTAINERS -- The Permittee shall comply with the following management practices:

1. A container holding hazardous waste must always be closed during storage, except when it is necessary to add, sample, or remove waste.

2. A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

F. INSPECTION

The Permittee shall inspect the container area daily, in accordance with the inspection schedule, specified in Volume 5 of the approved permit application, to detect leaks and deterioration of containers and the containment system caused by corrosion or other factors.

G. CONTAINMENT -- The Permittee shall construct, operate, and maintain the containment system according to the design plans and operating specifications contained in the Approved Permit Application and the conditions of this permit.

H. CLOSURE -- At closure, at a minimum, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residue must be decontaminated or removed. Closure of the container storage areas shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA's DLPC in writing of its intent to close the container storage area at least 180 days prior to the date closure is expected to begin.

Along with this notification, the Permittee shall submit the sampling and analysis plan to be used in demonstrating the storage area has been properly decontaminated. This plan shall be approved by the Illinois EPA's DLPC in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Illinois Environmental Protection Act. The response from the Illinois EPA shall approve and establish:

a. The sampling plan;

b. What contaminants must be analyzed for;

c. The level at which decontamination is considered complete.

2. Sweepings collected during closure of the container storage areas shall be managed as a hazardous waste. All washwater and rinsate generated during the closure of these units shall also be managed as a hazardous waste, unless it can be shown to be exempt under 35 Ill. Adm. Code 721.103(a)(2)(D).

3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for the container storage areas if all of the hazardous wastes or contaminated soils cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit will be modified to require post-closure care for the container storage area in accordance with 35 Ill. Adm. Code, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described in Condition H.3 above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan for the container storage area, the modification request shall be made no later than sixty (60) days after the determination is made.

5. Financial assurance for closure and post-closure of the container storage area, if required in accordance with Conditions H.3 and H.4 above, shall be provided within thirty (30) days following modification of the permit under the provisions of Condition H.4 above.

6. Within sixty (60) days after closure of the container storage area is complete, the Permittee shall submit certification to the Illinois EPA that the unit has been closed in accordance with the approved closure plan.

   The closure certification forms in Attachment E-1 or E-2 to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the container storage areas until the Illinois EPA approves the closure certification for the unit. The Illinois EPA's review of closure certifications for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.243.

   A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

   a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.

   b. A description of the method of waste handling and transport.

   c. Copies of the waste manifests.

   d. A description of the sampling and analytical methods used.

   e. A chronological summary of closure activities and the cost involved.

   f. Tests performed, methods and results.

   g. Color photographs of closure activities which document conditions before, during and after closure.

I. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE

1. The Permittee shall not locate containers which hold ignitable or reactive waste within 50 feet of the facility's property line.

2. The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.

Ignitable or reactive wastes must be separated and protected from sources of ignition or reaction including but not limited to:

a. Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (e.g., static, electrical, or mechanical), spontaneous ignition (e.g., from heat producing chemical reactions), and radiant heat.

b. While ignitable or reactive waste is being handled, the Permittee must confine smoking and open flame to specially designated locations.

c. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

1. "Incompatible Waste" means waste that meets the definition of "incompatible waste" in 35 Ill. Adm. Code 720.110.

2. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container, unless the procedures specified in the Approved Permit Application are followed.

Incompatible wastes or materials must not be placed in the same container unless precautions are taken to prevent reactions which:

a. Generate extreme heat or pressure, fire or explosions, or violent reactions

b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment

c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions

d. Damage the structural integrity of the device or facility

e. Through other like means, threaten human health or the environment.

The basic methods for preventing such reactions are to:

a. Treat one or both of the incompatible wastes/materials to render them compatible prior to placing them in the container

b. Physically separate the incompatible wastes/materials in the containers so that it is not possible for the incompatible wastes/materials to come in contact with each other.

3. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

4. The Permittee shall not store containers holding a hazardous waste that is with any incompatible waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments unless separated from the other material or protected from them by means of a dike, berm, well, or other devices.

5. The permittee shall not place containers of incompatible waste in the same storage bay.

6. Incompatible wastes in the stagging/receiving area may be separated according to DOT classifications. In all other areas of the facility incompatible wastes must be separated in accordance with 35 IAC 724.277(c).

K. SPECIAL CONDITIONS FOR CONTAINER STORAGE

1. All loading/unloading, initial sampling, and segregation operations shall take place in an area which has secondary containment.

2. No sump or secondary containment trench shall have a drain or be connected to a sewer line.

3. All concrete surfaces in the container storage bays shall be coated with an epoxy paint or resin which is chemically resistant and impermeable to the wastes stored in each bay or storage area.

4. All waste in the secondary containment systems must be removed within 24 hours of discovery.

5. All materials removed from secondary containment sumps and trenches shall be managed as hazardous wastes, if a sample is determined by testing to be hazardous.

6. 55 gallon containers or greater of ignitable wastes shall not be stacked.

7. Incinerator ash generated at the facility shall not be stored for more than 90 days. The Permittee may only store the on site generated incinerator ash up to 90 days in the ash

storage buildings or the 90-day storage pad. Incinerator ash must be placed in RCRA permitted storage if it exceeds 90 day storage.

8. Containers designated as solids charges for the incinerators may only be staged for less than 24 hours in areas surrounding the incinerators or stored in the permitted storage areas in accordance with Condition II(B)(2).

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SECTION III. TANK SYSTEMS

A. SUMMARY

The permittee may only store liquid wastes listed in Attachment E in the two tank farms and bulk solid wastes in the bulk storage area identified in Condition III(B) below.

B. WASTE IDENTIFICATION

1. The Permittee may store a total volume of 619,556 gallons of liquid hazardous waste and 184 cubic yards of bulk solid hazardous waste in the following units subject to the terms of this permit.

Tank Number	Location	Capacity (Gal)	Status
2	Tank Farm 1	4931	Existing
4	Tank Farm 1	4931	Existing
6	Tank Farm 1	7200	Existing
8	Tank Farm 1	5280	Existing
10	Tank Farm 1	12,869	Existing
20	Tank Farm 1	12,869	Existing
30	Tank Farm 1	12,869	Existing
40	Tank Farm 1	12,869	Existing
50	Tank Farm 1	12,869	Existing
60	Tank Farm 1	12,869	Existing
300	Tank Farm 3	30,000	Existing
302	Tank Farm 3	30,000	Existing
304	Tank Farm 3	30,000	Existing
306	Tank Farm 3	30,000	Existing
308	Tank Farm 3	30,000	Existing
310	Tank Farm 3	30,000	Existing
312	Tank Farm 3	10,000	Existing
314	Tank Farm 3	10,000	Existing
316	Tank Farm 3	10,000	Proposed
318	Tank Farm 3	10,000	Proposed
320	Tank Farm 3	10,000	Proposed
322	Tank Farm 3	10,000	Proposed
324	Tank Farm 3	10,000	Proposed
326	Tank Farm 3	10,000	Proposed
328	Tank Farm 3	10,000	Proposed
330	Tank Farm 3	10,000	Proposed
350	Tank Farm 3	30,000	Proposed

352	Tank Farm 3	30,000	Proposed
354	Tank Farm 3	30,000	Proposed
356	Tank Farm 3	30,000	Proposed
358	Tank Farm 3	30,000	Proposed
360	Tank Farm 3	30,000	Proposed
362	Tank Farm 3	30,000	Proposed
364	Tank Farm 3	30,000	Proposed
Bin 1	Bulk Solids Unit	46 cy^3	Existing
Bin 2	Bulk Solids Unit	46 cy^3	Existing
Bin 3	Bulk Solids Unit	46 cy^3	Existing
Bin 4	Bulk Solids Unit	46 cy^3	Existing

2. The Permittee is prohibited from storing or treating waste identified in Condition VI.2 of this permit

3. The Permittee may only manage bulk solid waste containing incidental free liquids in the TRKI Bulk Storage Unit (bulk storage pits). No pumpable liquid waste streams shall be managed in this unit. The bulk solid waste must be solidified and pass the paint filter test prior to incineration.

C. CONTAINMENT AND DETECTION OF RELEASES

1. The Permittee shall construct, operate, and maintain the tank systems according to the detailed plans and reports contained in the Approved Permit Application.

2. The Permittee shall construct, maintain, and operate the secondary containment systems in accordance with the detailed design plans and descriptions contained in the Approved Permit Application.

3. If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment, the Permittee shall prevent flow or addition of wastes to the tank system. The Permittee must also, within 24 hours after detection of the leak or, if the Permittee demonstrates that it is not possible, at the earliest possible time remove as much of the waste as is necessary to prevent further release of hazardous waste and to allow inspection and repair of the tank system to be performed. The Permittee must also remove hazardous wastes from the secondary containment system within 24 hours of detection of the release, or in as timely a manner as is possible to prevent harm to human health and the environment.

D. GENERAL OPERATING REQUIREMENTS

1. The Permittee shall not place hazardous wastes or treatment reagents in a tank system in such a manner as to cause the tank, its ancillary equipment, or the containment system to rupture, leak, or otherwise fail.

2. The Permittee shall use appropriate controls and practices to prevent spills and overflows from tank or containment systems using the methods specified in the Approved Permit Application.

3. The Permittee, in the event of a leak or a spill in the tank system, shall comply with the requirements of Condition III.C.3, using the practices and procedures described in the Approved Permit Application.

4. Bulk delivery trucks are permitted to remain in the truck staging/parking area or permitted storage area for sampling/analysis purposes, in case when waste must be rejected to an alternate facility or in the discrepancy resolution process. **Bulk delivery trucks are permitted to remain in the truck staging/parking area for a period up to 24 hours for sampling/analysis purposes before the waste must be shipped off-site or moved to permitted storage area.** These areas must be inspected daily to ensure the tankers are secured.

E. TANK SYSTEM CERTIFICATION

1. The Permittee shall obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system.

2. The Permittee shall obtain and keep on file at the facility a written assessment of the existing tank system integrity. The assessment shall be certified by an independent, qualified registered professional engineer.

F. INSPECTIONS

1. The owner or operator must inspect:

   a. Overfilling control equipment (e.g., waste feed cut-off systems) at least once each operating day to ensure that it is in good working order;

   b. Data gathered from monitoring equipment (e.g., pressure and temperature gauges and cathodic protection gauges) where present, at least once each operating day to ensure that the tank is being operated according to its design;

c. The construction materials of the above-ground portions of the tank, at least weekly to detect corrosion or erosion and leaking of fixtures and seams; and

d. The area immediately surrounding the tank, at least daily, to detect obvious signs of leakage (e.g., wet spots or dead vegetation).

2. The Permittee shall inspect each tank system to assess its condition. This inspection shall consist of a visual inspection, a pressure test and an ultrasonic thickness test in accordance with the following procedures:

a. An ultrasonic thickness test shall be conducted annually on the tank. This test may be conducted by Veolia personnel that have been trained on all ultrasonic thickness testing procedures.

b. Ancillary equipment must be visually inspected for leaks daily.

c. A detailed visual inspection of the tank's interior shall be conducted every fifth year to ensure the tank's integrity. During this internal inspection, the internal surface shall be inspected for rust, cracks and thin areas. Corrective action as specified by a qualified registered professional engineer or corrosion technician shall be taken if the internal inspection indicates that the interior surface of a tank system has been detrimentally affected by the hazardous waste which has been stored in it. Tanks shall be entered in accordance with 29 CFR 1910.94(d)(11). The internal inspections shall be conducted in accordance with the schedule included in the approved application.

d. The inspection of each tank shall be certified by a qualified, registered professional engineer, or corrosion technician.

e. In the event the inspection identified in Condition 2(c) indicates a failure may occur prior to the next 5-year inspection, the next inspection shall take place one year prior to the estimated date of failure.

f. All waste and washwater generated during evacuation of the tanks shall be managed as a hazardous waste unless analyses indicate the waste and washwater are non-hazardous waste (i.e., the waste is no longer characteristic or in the case of a listed waste, does not contain the constituent for which the waste was listed).

g. Results of the inspection shall be submitted to the Division of Land Pollution Control of the Illinois EPA within 60 days of the inspection date, and shall also be included in the opening record of this facility.

h. If the results of these inspections indicate a tank system is leaking, the procedures set forth in 35 Ill. Adm. Code 724.296 (as amended July 16, 1987) shall be followed.

G. REPORTING AND RECORDKEEPING

1. The Permittee shall report to the Illinois EPA's Regional Office within 24 hours after detection of a leak or spill in the tank system or secondary containment system, unless the amount released is less than or equal to one pound, and is immediately contained and cleaned up.

2. Within 30 days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information to the Illinois EPA:

   a. Likely route of migration of the release

   b. Characteristics of surrounding soil (including soil composition, geology, hydrogeology, and climate)

   c. Results of any monitoring or sampling conducted in connection with the release

   d. Proximity to downgradient drinking water, surface water, and populated areas.

   e. Description of response actions taken or planned.

H. CLOSURE

At closure, at a minimum, all hazardous waste and hazardous waste residues must be removed from tanks, discharge control equipment and discharge confinement structures. Remaining tanks, liners, bases, and soil containing or contaminated with waste or waste residue must be decontaminated or removed. Closure of the tank storage areas shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA's Division of Land Pollution Control in writing of its intent to close the tank system at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit the sampling and analysis plan to be used in demonstrating the tank system has been properly decontaminated. This plan shall be approved by the Illinois EPA's Division of Land Pollution Control in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a)

and 40(a) of the Illinois Environmental Protection Act. The response from the Illinois EPA shall approve and establish:

a. The sampling plan;

b. What contaminants must be analyzed for;

c. The level at which decontamination is considered complete.

2. Sweepings collected during closure of the tank storage areas shall be managed as a hazardous waste. All washwater and rinsate generated during the closure of these units shall also be managed as a hazardous waste, unless it can be shown to be exempt under 35 Ill. Adm. Code 721.103(a)(2)(D).

3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for a tank system if all of the hazardous wastes or contaminated soils cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in this permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, the tank system shall be considered to be a landfill and this Permit will be modified to require post-closure care for the affected tank system(s) in accordance with 35 Ill. Adm. Code, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described in Condition H.3 above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure plan and a post-closure care plan for the affected tank system within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made not to pursue clean closure prior to the implementation of the closure plan for the tank system, the modification request shall be made no later than sixty (60) days after the determination is made.

5. Financial assurance for closure and post-closure of any tank system being closed as a landfill, when required in accordance with Conditions H.3 and H.4 above, shall be provided within thirty (30) days following modification of the permit under the provisions of Condition H.4 above.

6. Within sixty (60) days after closure of any tank system is complete, the Permittee shall submit certification to the Illinois EPA that the unit has been closed in accordance with the approved closure plan.

   The closure certification form in Attachment E-1 or E-2 to this permit or a certification with identical wording must be used. Signatures must meet the

requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for each tank system identified in Condition B.1 above. Documents regarding financial assurance for closure of this facility may be modified after the Illinois EPA approves the closure certification for any or all of the tank systems. The Illinois EPA's review of closure certifications for partial or final closure will be reviewed in accordance with 35 Ill. Adm. Code 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

a. The volume of waste and waste residue removed, including wastes resulting from decontamination procedures.

b. A description of the method of waste handling and transport.

c. Copies of the waste manifests.

d. A description of the sampling and analytical methods used.

e. A chronological summary of closure activities and the cost involved.

f. Tests performed, methods and results.

g. Color photographs of closure activities which document conditions before, during and after closure.

I. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not place ignitable or reactive waste in the tank system, unless the procedures specified in the Approved Permit Application are followed.

2. The Permittee shall 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 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" issued July 17, 1987.

J. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same tank system, unless the procedures specified in the Approved Permit Application are followed.

   Incompatible wastes or materials must not be placed in the same tank system unless precautions are taken to prevent reactions which:

   a. Generate extreme heat or pressure, fire or explosions, or violent reactions

   b. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment

   c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions

   d. Damage the structural integrity of the device or facility

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SECTION IV. INCINERATION

A. SPECIAL CONDITIONS FOR ALL INCINERATORS

1. The Permittee is authorized to operate the following incinerators in accordance with the conditions of the permit: No other incinerator may be constructed or operated at this facility without first obtaining the appropriate permit modification.

2. All incinerator monitors shall be cleaned and calibrated as defined in Section IV.a.F and Section IV.b.F. All stack gas monitors shall be calibrated using standardized calibration gases.

3. At all times when burning waste derived fuel, the incinerators shall be at permitted operating temperatures and all air pollution control equipment and automatic waste feed cut-off interlocks shall be operating. Waste derived fuel burned in the secondary chamber of the fixed hearth incinerators must meet the following specifications:

   a. Heat content at a minimum of 13,000 Btu/gallon.
   b. Ash content less than 3.75 wt. %.
   c. Organic halogen content less than 5% by weight.
   d. PCB content less than 50 ppm.

4. The Permittee shall not incinerate source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, 42 U.S.C. 2011 et. seq. or radioactive material discharged in accordance with Ill. Rev. Stat. ch. 111 1/2, Sec. 230.1 et. seq., certain shock sensitive or air reactive wastes identified in Section VI of this permit, wastes containing greater than 50 ppm PCBs, asbestos wastes, waste streams designated F020, F021, F022, F023, F026, F027, or F028, or any waste listed in Section VI of this permit. The permittee shall not accept wastes with detectable amounts of dioxins or furans, as defined in the waste analysis plan, dioxin policy.

5. The Permittee shall obtain a construction permit prior to construction, and an operating permit from the Bureau of Air prior to operation of any air pollution source as defined by 35 Ill. Adm. Code 201.102 in accordance with 35 Ill. Adm. Code 201.142 and 201.143.

6. The Permittee shall comply with all special conditions of all effective permits issued by the Illinois EPA Division of Air Pollution Control.

7. The Permittee shall cease all waste feed to an incinerator if all continuous monitors for that incinerator are not in operation.

8. In no event shall any monitoring equipment be disconnected, shut down, or manipulated to avoid compliance with this permit.

9. Mercury Annual Feed Rate Limit. The Permittee shall not feed more than a total of 3.63 kilograms (kg) of mercury per year to any combination of the three incinerator units. The Permittee shall not feed mercury or mercury-containing materials, including hazardous waste, solid waste, fuels, and any other feedstreams into the incinerators at a rate that will result in an exceedance of the mercury annual feed rate set forth in this paragraph. For purposes of the mercury annual feed rate limit, the first year shall begin on the effective date of this permit and each year thereafter shall begin on the anniversary of the effective date of the permit.

10. Special Mercury Procedures. The Permittee shall implement the following special mercury procedures beginning on the effective date of this permit:

    (i) Pre-acceptance screening procedure. The Permittee shall screen all waste for mercury prior to acceptance for incineration at the facility. The Permittee shall obtain, prior to the shipment of waste to the facility, a representative sample of the waste for mercury analysis by the Permittee using appropriate quality assurance/quality control procedures and an appropriate test method that are consistent with the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846). The Permittee shall follow this pre-acceptance screening sampling and analysis procedure at least once a year for each waste stream using appropriate quality assurance/quality control procedures and an appropriate test method that are consistent with SW-846. If the sampling analysis indicates that the concentration of mercury in the waste is such that the mercury annual feed rate limit in condition IV(A)(9) would be exceeded, the Permittee shall not accept such waste for incineration at the facility.

    (ii) Waste acceptance procedure. The Permittee shall conduct representative sampling of each shipment of waste for mercury within 24 hours of receipt and shall analyze such samples using appropriate quality assurance/quality control procedures and an appropriate test method that are consistent with SW-846. If the sampling analysis indicates that the concentration of mercury in the waste shipment is such that the mercury annual feed rate limit in condition IV(A)(9) would be exceeded, the Permittee shall not accept such waste for incineration at the facility.

    (iii) Batch sampling procedure. If waste accepted for incineration is batched, treated, blended, mixed, or otherwise altered from its shipped state, the Permittee shall sample and analyze such batched, treated, blended, mixed, or otherwise altered waste for mercury, in its final form as feed for incineration, prior to incineration

using appropriate quality assurance/quality control procedures and an appropriate test method that are consistent with SW-846. If the sampling analysis indicates that the concentration of mercury in the waste is such that the total annual feed rate limit for mercury in condition IV(A)(9) would be exceeded, the Permittee shall not incinerate such waste at the facility.

(iv) Fuel procedure. The Permittee shall document the concentration of mercury in any fuel other than natural gas including used oil, diesel, and alternative fuels, but not including hazardous waste, fed into the incinerators by either (1) obtaining analytical results from each fuel supplier or (2) conducting representative sampling of each fuel supply and analyzing such samples using appropriate quality assurance/quality control procedures and appropriate test methods. The Permittee shall follow this procedure at least once per year for each fuel supply. If the sampling analysis indicates that the concentration of mercury in the fuel is such that the total annual feed rate limit for mercury in condition IV(A)(9) would be exceeded, the Permittee shall not feed such fuel to the incinerators.

(v) Special mercury procedure recordkeeping. The Permittee shall document compliance with the Special Mercury Procedures set forth in condition IV(A)(10). Such documentation shall include, but is not limited to, pre-acceptance waste screening determinations, waste acceptance determinations, sampling logs, analysis logs, sampling results, and quality assurance/quality control documentation. Permittee shall maintain such records for seven calendar years and make them available at all times for inspection by U.S. EPA, Illinois EPA, local agencies, or their duly authorized representatives.

(vi) Determination of mercury concentration for mercury annual feed rate calculation. The Permittee shall use the concentration of mercury as set forth below in order to calculate the mass of mercury for each waste or fuel fed to each incinerator unit consistent with condition IV(A)(11):

(1) if waste is batch fed to an incinerator unit, the mercury concentration for annual feed-rate limit calculation shall be:

(a) the result of the batch sampling analysis required by condition (A)(10)(iv); or

(b) the estimated quantitation limit (EQL), defined as the lowest non-zero concentration of mercury in a 5-point linear calibration study multiplied by the appropriate extraction and dilution factors, if

mercury is not detected at or above the EQL in the batch sampling analysis required by condition IV(A)(10)(iii).

(2) if batch sampling is not required, the mercury concentration for annual feed-rate limit calculation shall be:

(a) the highest concentration of mercury detected at or above the EQL from the sampling analyses required for by conditions IV(A)(10)(i) and (ii), or condition IV(A)(10)(iv) for fuels; or

(b) the highest EQL from the sampling analyses required by conditions IV(A)(10)(i) and (ii), or condition IV(A)(10)(iv) for fuels, if mercury is not detected at or above the EQL in any of the sampling analyses required by conditions IV(A)(10)(i) and (ii), or condition IV(A)(10)(iv) for fuels, and there is acceptable knowledge that mercury could be present in the waste or fuel; or

(c) one-half of the highest EQL from the sampling analyses required by conditions IV(A)(10)(i) and (ii), or condition IV(A)(10)(iv) for fuels, if mercury is not detected at or above the EQL in either of the sampling analyses required by conditions IV(A)(10)(i) and (ii), or condition IV(A)(10)(iv) for fuels, and there is acceptable knowledge that that mercury is not present in the waste.

(vii) Exemptions to the special mercury procedures. The following wastes that the Permittee determines do not contain mercury consistent with this condition IV(A)(10)(vii) shall be exempt from the Special Mercury Procedures set forth in conditions IV(A)(10)(i) through (vi):

(1) Packaged chemicals from laboratories, hospitals, household clean sweeps, or manufacturing facilities, including scintillation vials packed in accordance with Small Quantity Chemical Guidelines (SQCG's) except those that are packaged in numerous small containers or unknowns (such as having no labels or other identification). For packaged chemicals, the Permittee shall obtain a packing list for each container from the generator specifying type and quantity of chemicals contained within;

(2) Empty containers as defined in 35 IAC 721.107(b);

(3) Pharmaceutical and commercial products or chemicals that are off-specification or outdated and are packaged in consumer quantities, are unused or banned, and are in their original packaging except those that are

packaged in numerous small containers or unknowns (such as having no labels or other identification);

(4) Aerosol cans, lecture bottles or gas cylinders (not including unknown wastes, such as those having no labels or other identification);

(5) Controlled substances regulated by the Federal Government and are handled unopened until destroyed in the incinerator; and

(6) Explosive, poison inhalation hazard (PIH), or odiferous material, such as mercaptan, which present sampling, and analytical safety hazards, that are handled unopened until destroyed in the incinerator.

The Permittee shall review any container labels, material safety data sheets, drum inventories, packing lists, and any other relevant data or information provided by the generator to determine whether mercury is present in any waste listed above that may be exempt. Only those wastes listed in 1-6 above that the Permittee determines in writing contain no mercury based on such review are exempt from the Special Mercury Procedures set forth in conditions IV(A)(10)(i) through (vi). The Permittee's written determination of exemption from the Special Mercury Procedures shall describe the information reviewed and the basis for the determination that no mercury is present. Any waste listed above for which there is insufficient information to allow the Permittee to make a reasonable determination that mercury is not present shall not be exempt. The Permittee shall maintain any written determination of exemption at the facility for seven calendar years and make it available at all times for to U.S. EPA, the Illinois EPA, local agencies, or their duly authorized representatives for inspection.

(viii) Condition IV(A)(10) shall supercede any conflicting or less stringent provision in the Permittees's waste analysis plan.

11. Demonstration of Compliance with Mercury Annual Feed Rate Limit. Permittee shall prepare and maintain a mercury feed rate log that demonstrates compliance with the mercury annual feed rate limit set forth in condition IV(A)(9). All incinerator feed streams, including, but not limited to, liquid feeds, direct transfer, solid waste lines, drum and bulk solid feeds, fuels, and any other feed stream, utilized by the Permittee to feed waste or other material into the primary and secondary combustion chambers of any of the three incinerator units, shall be included in calculating the total mass of mercury for purposes of demonstrating compliance with the mercury annual feed rate limit set forth in condition IV(A)(9). The mercury feed rate log shall include, but is not limited to, the following:

(i) a description of the types of waste (i.e., liquid, solid, semi-solid, or container, etc.) and fuels fed into each incinerator unit each day;

(ii) the corresponding mass of each type of waste and fuel fed to each incinerator unit each day;

(iii) the corresponding concentration of mercury in each type of waste and fuel fed to each incinerator unit each day based on the applicable sampling results as set forth in condition IV(A)(10)(vi), Determination of Mercury Concentration for Mercury Annual Feed Rate, above;

(iv) the sample identification number that corresponds to the mercury concentration used;

(v) the total mass of mercury in each waste type and fuel fed to each incinerator unit each day;

(vi) the total mass of mercury in all waste and fuel fed to each incinerator unit each day;

(vii) the total mass of mercury in any other material fed to each incinerator unit each day based on representative sampling or other acceptable knowledge;

(viii) the total mass of mercury fed to all three incinerator units combined each day;

(ix) a daily running total for the year of the mass in kilograms of mercury fed to all three incinerator units combined beginning on the effective date of this permit for the first year and for each year thereafter beginning on the anniversary of the effective date of this permit; and

(x) on each anniversary of the effective date of this permit, the total mass in kilograms of mercury fed to all three incinerators combined for the preceding year.

12. The Permittee shall maintain the mercury feed rate log at the facility and make it available at all times for to U.S. EPA, the Illinois EPA, local agencies, or their duly authorized representatives for inspection.

13. The Permittee shall maintain a record at the facility of the feed data and any other information upon which the mercury feed rate log is based and such record must be available at all times for U.S. EPA, the Illinois EPA, local agencies, or their duly authorized representatives for inspection.

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SECTION IV.a. FIXED HEARTH INCINERATORS NO. 2 & 3

A. APPLICABILITY

The condition of Section IV.a. only pertains to Fixed Hearth Incinerators No. 2 and 3.

B. PERFORMANCE STANDARDS

The Permittee shall construct and maintain the incinerators so that, when operated in accordance with the operating requirements specified in this permit, they will each meet the following performance standards (35 Ill. Adm. Code 724.443):

1. The incinerators shall achieve a destruction and removal efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC) designated in this permit for each waste feed. DRE shall be determined using the method specified in 35 Ill. Adm. Code 724.443(a)(1).

2. The Permittee shall control hydrogen chloride (HCl) emissions, such that the rate of emissions is no greater than 77 ppm for HC1/C12 on a one-hour rolling average in the stack gas prior to entering any pollution control equipment of each incinerator.

3. The incinerators shall not emit particulate matter in excess of 0.08 grains per dry standard cubic foot when corrected for the amount of oxygen in the stack gas in accordance with the formula specified in 35 Ill. Adm. Code 724.443(c).

4. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, compliance with these operating conditions will not be deemed sufficient to ensure compliance with the performance standards if the Illinois EPA receives information justifying modification, revocation, or reissuance of the permit. Pursuant to 35 Ill. Adm. Code 724.443(d).

C. LIMITATION ON WASTES

1. The physical form of the liquid and sludge wastes must not exceed the burner or nozzle manufacturer's specifications.

2. The total feed rate of chlorine to the incinerator system must not exceed 233 lb/hr.

3. The labpacks incinerated at the site must not exceed the limits approved through the Small Quantity Chemical Guidelines referenced in the Waste Analysis Plan.

4. The total thermal loading to the incinerator system from all waste must be less than 16 million BTU/hr.

5. High BTU liquid waste fed to the Upper Chamber waste injector must have a heating value greater than 8,000 BTU/lb and a viscosity within the injector manufacturer's specifications.

6. Waste derived fuels fed to the Upper Chamber waste burner must have a heating value greater than 13,000 Btu/lb and a viscosity within the burner manufacturer's specifications.

7. During start-up and shut-down of the incinerator, hazardous wastes must not be introduced into the incinerator unless the incinerator is operating within the conditions specified in Section IV.a.E.

8. Waste that is in the lower combustion chamber of fixed Hearth Incinerator No. 2 or 3 when the lower chamber temperature is less than 1590 degrees F for any one (1) minute average, must be re-incinerated at rotary kiln incinerator TRKI #4 or analyzed to demonstrate compliance within the Land Disposal Restriction requirements specified in 35 Ill. Adm. Code 728.141 or 35 Ill. Adm. Code 728.143.

D. OPERATING CONDITIONS

The permittee must comply with the following operating limits whenever waste is in the system. Waste is in the system when any waste remains in the belly of the incinerator and has not been rammed out, or it has been less than fifteen (15) seconds since the last liquid waste feed was shut off:

1. The lower chamber temperature must not be less than 1590 degrees F for any one (1) minute average, except when the upper chamber temperature is greater than 1845 degrees F for a one (1) hour rolling average.

2. The upper chamber temperature must not be less than 1845 degrees F for a one (1) hour rolling average.

3. Stack gas flow rate must not be greater than 17,198 acfm for more than one (1) minute.

4. The physical forms and feed rates of the wastes fed to the lower chamber must be limited to the following:

- Containers 1,053 lb/hr
- Specialty Feed 724 lb/hr
- High BTU Liquids 2,012 lb/hr
- Aqueous wastes 1,993 lb/hr

5. The feed rates of high BTU liquid (including waste derived fuel) to the upper chamber must be less than 364 lb/hr.

6. Opacity in the stack must not exceed 30% for more than eight (8) one minute periods in a one-hour period and must not exceed 60% on an instantaneous basis.

7. Carbon monoxide concentration in the stack gas must not exceed 100 ppm for a one (1) hour rolling average.

8. Fugitive emissions from the combustion zone must be controlled by:

   a. Keeping the combustion zone totally sealed against fugitive emissions; or

   b. Maintaining a combustion zone pressure lower than atmospheric pressure; or

   c. An Illinois EPA approved alternate means of control that has demonstrated to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

9. The emergency cap may only be opened in emergency situations which could endanger downstream air pollution control devices or jeopardize safety of personnel and then only after all waste feeds have been cut off. The following failure situations are emergency situations where the Permittee may manually open the emergency cap:

   1. High temperature (greater than 500°F) at the outlet of the Spray Dryer Absorber (SDA).
   2. Failure of I.D. Fan
   3. Loss of Electrical Power
   4. Loss of Air Pressure

E. AUTOMATIC WASTE FEED CUT-OFF

The Permittee must operate the automatic waste feed cutoffs so as to prevent any introduction of waste to the incinerator under the following conditions:

Parameter	Limit
Lower Chamber temperature (1 hr. rolling avg.)	< 1627 F
Upper Chamber temperature (1 hr. rolling avg.)	< 1845 F
Lower Chamber pressure	≥ -0.1 in. w.c. for 5 seconds[1]
Upper Chamber pressure	≥ -0.1 in. w.c. for 5 seconds[1]
Stack gas flow rate	> 17,198 acfm
Baghouse low pressure drop (1 min. avg.)	< 2 in. w.c.
Baghouse high pressure drop (1 min. avg.)	> 10 in. w.c.
SDA high exit temperature (1 min. avg.)	> 500 F
Stack gas CO level (1 hr rolling avg.)	> 100 ppm
Stack gas HCl level (1 min. avg.)	> 500 ppm
Stack gas HCl level (1 hr. rolling avg.)	> 100 ppm[1]
Stack gas opacity (1 min. avg.)	> 10%
Failure of a stack gas monitor	loss of signal
Failure of any process monitor	loss of signal[2]
Failure of waste feed measuring or recording equipment	loss of signal[2]
ID fan failure	loss of signal
Emergency cap	open

Notes: 1. The Permittee must notify FOS-Collinsville within three (3) business days if waste feed is cut off due to lower or upper chamber pressure or the HCl level.

If the waste feed is cut off due to a high hourly rolling average HCl level, the Permittee must submit a written report within fifteen (15) days to the FOS-Collinsville office. The report shall contain sufficient information to determine whether or not the HCl emissions exceeded the levels identified in Section IV.a.B.2.

2. Failure of a waste feed rate monitor, or any waste feed measuring or recording equipment requires the Permittee to stop only the feed of the material associated with the failed monitor or failed measuring or recording equipment.

F. INCINERATOR MONITORING AND INSPECTIONS

The Permittee shall construct, maintain, calibrate and operate monitoring equipment which continuously records the operating parameters specified in this section.

The Permittee shall monitor Fixed Hearth Incinerators No. 2 and No. 3 and record the data as specified below:

PARAMETER	METHOD	MONITORING FREQUENCY	CALIBRATION FREQUENCY
Upper & Lower Chamber Temperature	TYPE "K" Thermocouple	Continuously	Annually
Spray Dryer Absorber Inlet Temperature	TYPE "K" Thermocouple	Continuously	Annually
Spray Dryer Absorber Outlet Temperature	TYPE "K" Thermocouple	Continuously	Annually
Combustion Gas Flowrate	Pitot Tube	Continuously	Annually
Stack Gas Excess Oxygen	In-Situ Zirconium Oxide Fuel Cell	Continuously	Quarterly
Stack Gas CO	In-Situ NDIR	Continuously	Quarterly
Stack Gas Hydrocarbon	FID	Continuously	Quarterly
Stack Gas Opacity	Altech continuous emission monitor	Continuously	Quarterly
Stack Gas HC1	In-Situ NDIR	Continuously	Quarterly
Liquid Feed Rate	Mass Flowmeters	Continuously	Annually

PARAMETER	METHOD	MONITORING FREQUENCY	CALIBRATION FREQUENCY
Specialty Feeder	Scale	Continuously	Quarterly
Fabric Filter Pressure Drop	Delta P	Continuously	Quarterly
Chamber Pressures	Pressure Transmitters	Continuously	Quarterly
Spills, Leaks, Fugitive Emissions	Visual	Daily	N/A
Emergency Waste Feed Cut-off System	Operational Inspection	Daily	Every two weeks
Concentrated Lime Slurry Flowrate	Magnetic	Continuously	Annually

1. The Permittee shall employ the process monitors specified in the approved application or equivalent monitors. All monitors except the lower and upper chamber thermocouples shall have an operating range which is at least 25 percent greater than the permitted operating range for the parameter being monitored.

2. The Permittee shall subject the incinerator and associated equipment (including, pumps, valves, conveyors, and pipes) to a thorough visual inspection for leaks, spills, fugitive emissions, and signs of tampering at least daily and in accordance with the inspection schedule, contained in Volume 5 of the approved permit application.

G. WASTE ANALYSIS MONITORING

1. The Permittee shall conduct the performance test required by the 35 Ill. Adm. Code 724.447(a)(3) once every three (3) years on one of the fixed hearth incinerators beginning in 2009 or upon request of the Illinois EPA.

2. Results from the performance testing by conditions IV.a.G shall be submitted to the Illinois EPA within 60 days of completion of the performance. If the results of the performance test indicate the incinerator is not operating in compliance with the conditions of this permit, the permittee shall report the results in accordance with

standard condition 19 or 20 and submit any required permit modification as soon as practical.

H. RECORDING AND MAINTAINING DATA

1. The Permittee shall record and maintain monitoring and inspection data in the operating record. The Permittee shall make this information available to the Illinois EPA upon request.

2. The Permittee must provide real time computer access to the operation and monitoring of the fixed hearth incinerators Nos. 2 and 3 for all compliance data for Operating Limits (Section IV.a.D.) and Automatic Waste Feed Cut-off requirements (Section IV.a.E.) by way of a computer network as follows:

   a. Via phone line modem which provides (15) second data on a real time basis. If the phone hook-up to the FOS-Collinsville Office is interrupted, the Permittee may continue to operate the incinerator as long as all compliance data is retained.

3. Except for stack gas flow rate and waste feed rates, the Permittee must record one minute averages of all compliance data for Operating Limits (Section V.a.D.).

4. The Permittee must provide continuous video surveillance to document whether or not there have been any fugitive emissions from the combustion zone of the incinerator and the emergency cap. The video tape must be archived thirty (30) days before it may be reused or discarded. If a video tape does not contain any video of a fugitive emission from the combustion zone of the incinerator or the emergency cap, the video tape may be reused or discarded prior to the end of the thirty (30) day period.

I. TWENTY-FOUR HOUR REPORTING

1. The permittee shall report any non-compliance which may endanger health of the environment orally within 24 hours after the permittee becomes aware of the circumstances, including:

   a. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies;

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

   The description of the occurrence and its cause shall include:

a. Name, address, and telephone number of the owner or operator;

b. Name, address, and telephone number of the facility;

c. Date, time, and type of incident;

d. Name and quantity of material(s) involved;

e. The extent of injuries, if any;

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

g. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance and its cause; the period of noncompliance including exact dates, times, and, if the noncompliance has not been corrected, the anticipated time the noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The Permittee shall orally report to the Illinois EPA's Collinsville Regional Office any other noncompliance with the conditions identified in Section IV.a.D. as soon as practicable, but in no event later than three business days after the act of noncompliance occurred. Within fifteen calendar days of the act of noncompliance, the Permittee shall notify the Illinois EPA in writing and describe the cause(s) of the claimed occurrence which caused or may cause the noncompliance, the measures taken or to be taken to prevent or minimize the noncompliance, and the timetable by which those measures will be implemented.

J. CLOSURE

At closure all waste and waste residues must be removed from the incinerators. Remaining equipment must be decontaminated or removed. Closure of the incinerators shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA's DLPC in writing of its intent to close the incinerators at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit the sampling and analysis plan to be

used in demonstrating the incinerator has been properly decontaminated. This plan shall be approved by the Illinois EPA's DLPC in writing prior to being implemented. Illinois EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Environmental Protection Act. The response from the Illinois EPA shall approve and establish:

a. The sampling plan;

b. What contaminants must be analyzed for;

c. The level at which decontamination is considered complete.

2. Sweepings collected during closure of the incinerators shall be managed as a hazardous waste. All washwater and rinsate generated during the closure of these units shall also be managed as a hazardous waste, unless it can be shown to be exempt under 35 Ill. Adm. Code 721.103(a)(2)(D).

3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for the incinerators if all of the hazardous wastes or contaminated soils cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit will be modified to require post-closure care for the container storage area in accordance with 35 Ill. Adm. Code, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described in Condition J.3 above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan for the container storage area, the modification request shall be made no later than sixty (60) days after the determination is made.

5. Financial assurance for closure and post-closure of the incinerators, if required in accordance with Conditions J.3 and J.4 above, shall be provided within thirty (30) days following modification of the permit under the provisions of Condition J.4 above.

6. Within sixty (60) days after closure of the incinerators are complete, the Permittee shall submit certification to the Illinois EPA that the units have been closed in accordance with the approved closure plan.

The closure certification forms in Attachments C-1 or C-2 to this permit or a certification with identical wording must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer (registered in the State of Illinois) should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the incinerator until the Illinois EPA approves the closure certification for the unit. The Illinois EPA's review of closure certifications for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.

b. A description of the method of waste handling and transport.

c. Copies of the waste manifests.

d. A description of the sampling and analytical methods used.

e. A chronological summary of closure activities and the cost involved.

f. Tests performed, methods and results.

g. Color photographs of closure activities which document conditions before, during and after closure.

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SECTION IV.b. TRANSPORTABLE ROTARY KILN INCINERATOR (TRKI NO. 4)

A. APPLICABILITY

The conditions of Section IV.b only pertains to the Transportable Rotary Kiln Incinerator (TRKI No. 4).

B. PERFORMANCE STANDARDS

The Permittee shall construct and maintain the incinerator so that, when operated in accordance with the operating requirements specified in this permit, it will meet the following performance standards (35 Ill. Adm. Code 724.443):

1. The incinerator shall achieve a destruction and removal efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC) designated in this permit for each waste feed. DRE shall be determined using the method specified in 35 Ill. Adm. Code 724.443(a)(1).

2. The Permittee shall control hydrogen chloride (HCL) emissions is no greater than 77 PPM for HCL/Cl2 on a one-hour rolling average in the stack gas prior to entering any pollution control equipment in accordance with 35 Ill. Adm. Code 724.443 (b).

3. The incinerator shall not emit particulate matter in excess of 0.08 grains per dry standard cubic foot when corrected for the amount of oxygen in the stack gas in accordance with the formula specified in 35 Ill. Adm. Code 724.443(c).

4. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, compliance with these operating conditions will not be deemed sufficient to ensure compliance with the performance standards if the Illinois EPA receives information justifying modification, revocation, or reissuance of the permit pursuant to 35 Ill. Adm. Code 724.443(d).

C. LIMITATION ON WASTES

1. The physical form of the liquid and sludge wastes must not exceed the burner or nozzle manufacturer's specifications.

2. The total feed rate of chlorine to the incinerator system must not exceed 500 lb/hr.

3. The labpacks incinerated at the site must not exceed the limits approved through Small Quantity Chemical Guidelines referenced in the Waste Analysis Plan.

4. Prior to incineration, bulk solid waste in the TRKI Bulk Storage Unit must be solidified and pass the paint filter test.

5. The Permittee shall limit the total thermal loading to the incinerator from all waste to less than 50 million BTU/hr.

6. Waste derived fuels fed to the SCC waste burner must have a heating value greater than 13,000 Btu/lb and a viscosity within the burner manufacturer's specifications.

7. High Btu liquid wastes fed to the SCC waste injector must have a heating value greater than 5,000 Btu/lb and a viscosity within the injector manufacturer's specifications.

8. During start-up and shut-down of the incinerator, hazardous wastes must not be introduced into the incinerator unless the incinerator is operating within the conditions specified in Section IV.b.E.

9. Waste that is in the kiln of TRKI No. 4 when the kiln temperature is less than 1240 degrees F for any one (1) minute average, must be re-incinerated at a TRKI No. 4 or analyzed to demonstrate compliance with the Land Disposal Restriction Requirements specified in 35 Ill. Adm. Code 728.141 or 35 Ill. Adm. Code 728.143.

D. OPERATING CONDITIONS

The permittee must comply with the following operating limits whenever waste is in the system. Waste is in the system for thirty (30) minutes of kiln rotation time following the last solid waste charge, or it has been less than fifteen (15) seconds since the last liquid waste feed was shut off.

1. The kiln temperature must not be less than 1240 degrees F for any one (1) minute average except when the secondary combustion chamber temperature is greater than 1880 degrees F for a one (1) hour rolling average.

2. The secondary chamber temperature must not be less than 1880 degrees F for a one (1) hour rolling average.

3. Stack gas flow rate must not be greater than 43,000 acfm for more than one (1) minute.

4. The physical forms and feed rates of the wastes fed to the kiln must be limited to the following:

- Solids (Bulk and Containers) not to exceed 3,000 lb/hr of containerized solids	15,000 lb/hr
- Sludges/High Btu liquids	1,100 lb/hr
- Aqueous wastes	1,700 lb/hr

5. The feed rates of high Btu liquid wastes (including waste derived fuels) to the secondary combustion chamber (SCC) must be less than 1,000 lb/hr.

6. Opacity in the stack must not exceed 30% for more than eight (8) one minute periods in a one-hour period and must not exceed 60% on an instantaneous basis.

7. Carbon monoxide concentration in the stack gas must not exceed 100 ppm for a one (1) hour rolling average.

8. Fugitive emissions from the combustion zone must be controlled by:

   a. Keeping the combustion zone totally sealed against fugitive emissions; or

   b. Maintaining a combustion zone pressure lower than atmospheric pressure; or

   c. An Illinois EPA approved alternate means of control that has demonstrated to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

9. The emergency cap may only be opened in emergency situations which could endanger downstream air pollution control devices or jeopardize safety of personnel and then only after all waste feeds have been cut off. The following failure situations are emergency situations where the Permittee may manually open the emergency cap:

   1. High temperature (greater than 500EF) at the outlet of the Spray Dryer Absorber (SDA)
   2. Failure of I.D. Fan
   3. Loss of Electrical Power
   4. Loss of Air Pressure

10. The surge vent must not open.

E. AUTOMATIC WASTE FEED CUT-OFF

TWI must operate the automatic waste feed cutoffs so as to prevent any introduction of waste to the incinerator under the following conditions:

Parameter	Limit
Kiln temperature (1 hr. rolling avg.)	< 1400 F
SCC temperature (1 hr. rolling avg.)	< 1880 F
Kiln pressure	> atmospheric[1]
SCC pressure	> atmospheric[1]
Stack gas flow rate	> 43,000 acfm
Baghouse low pressure drop (1 min. avg.)	< 2 in. w.c.
Baghouse high pressure drop (1 min. avg.)	> 10 in. w.c.
Tempering chamber exit temperature (1 min. avg.)	> 1200 F
SDA high exit temperature (1 min. avg.)	> 500 F
Stack gas CO level (1 hr rolling avg.)	> 100 ppm
Stack gas HCl level (1 min. avg.)	> 500 ppm
Stack gas HCl level (1 hr. rolling avg.)	> 35 ppm
Stack gas opacity (1 min. avg.)	> 10%
Failure of a stack gas monitor	loss of signal
Failure of any process monitor	loss of signal[2]
Failure of combustion air fan	loss of signal
Failure of waste feed measuring or recording equipment	loss of signal[2]
ID fan failure	loss of signal
Emergency cap	open
Surge vent	open
Carbon injection unit	non-operational

Notes: 1. The Permittee must notify FOS-Collinsville within three (3) business days if waste feed is cut off due to kiln or SCC pressure.

If the waste feed is cut off due to a high hourly rolling average HCl level, the Permittee must submit a written report within fifteen (15) days to the FOS-Collinsville office. The report shall contain sufficient information to determine whether or not the HCl emissions exceeded the levels identified in Section IV.b.B.2.

2. Failure of a waste feed rate monitor, fuel feed rate monitor, or any waste feed measuring or recording equipment requires the Permittee to stop only the feed of the

material associated with the failed monitor or failed measuring or recording equipment.

F. INCINERATOR MONITORING AND INSPECTIONS

The Permittee shall construct, maintain, calibrate and operate monitoring equipment which continuously records the operating parameters specified in this section.

The Permittee shall monitor the Transportable Rotary Kiln Incinerator No. 4 and record the data as specified below:

Parameter	Method	Monitoring Frequency	Calibrating Frequency
High Btu Liquid waste feed rate	Mass flowmeter	Continuously	Annually
Aqueous Liquid waste feed rate	Mass flowmeter	Continuously	Annually
Sludge waste feed rate	Mass flowmeter	Continuously	Annually
Drummed & Bulk Solid waste feed rate	Scale	Each Charge	Quarterly
Lab Pack Waste feed rate	Scale	Each Charge	Quarterly
Waste derived fuel feed rate	Mass flowmeter	Continuously	Annually
No. 2 fuel oil	Mass flowmeter	Continuously	Annually
Natural gas	Limiting Orifice	Continuously	Annually

Parameter	Method	Monitoring Frequency	Calibrating Frequency
Kiln & SCC temperature	Infrared pyrometers or thermo-couple(scc) transmitters	Continuously	Annually[1]
Spray Dryer Absorber Inlet Temperature	Type "K" Thermocouple	Continuously	Annually
Combustion Gas Flow Rate	Thermal dis-persion flow transmitter	Continuously	Annually
Stack Gas Excess Oxygen	IN-Situ Zirconium Oxide Fuel Cell	Continuously	Monthly[1]
Stack Gas CO	Altech Extractive continuous Emission Monitor	Continuously	Monthly[1]
Stack Gas Total Hydrocarbon	In-Situ NDIR	Continuously	Monthly[1]
	FID Heated[2] Probe	Continuously	Monthly
Stack Gas Opacity	In-Situ NDIR	Continuously	Monthly[1]
Stack Gas HCL Flow Rate	Altech Extractive continuous Emission Monitor	Continuously	Monthly[1]

Parameter	Method	Monitoring Frequency	Calibrating Frequency
Fabric Filer	Delta P Transmitter	Continuously	Quarterly
Chamber Pressures Pressure Drop	Pressure Transmitter	Continuously	Quarterly
Spills, Leaks, Fugitive Emissions	Visual	Daily	
Emergency Waste Feed Cut-off System	Operational Inspection	Daily	Every two weeks
Concentrated Lime Slurry Flow Rate	Magnetic	Continuously	Annually
Ripco Injector	Visual	Quarterly	

1. Each monitor must be calibrated in accordance with the frequency indicated above.

The Permittee must employ the process monitors specified in the approved application or equivalent monitors. All monitors shall have an operating range which is at least 25 percent greater than the permitted operating range for the parameter being monitored.

The Permittee must subject the incinerator and associated equipment (including monitoring and recording devices, pumps, valves, conveyors, and pipes) to a thorough visual inspection for leaks, spills, fugitive emissions, and signs of tampering at least daily and in accordance with the inspection schedule, contained in Volume 5 of the approved permit application.

G. WASTE ANALYSIS MONITORING

The Permittee shall conduct the performance test required by the Ill. Adm. Code 724.447(a)(3) once every three (3) beginning in 2009 or upon request of the Illinois EPA.

H. RECORDING AND MAINTAINING DATA

1. The Permittee shall record and maintain monitoring and inspection data in the operating record. The Permittee shall make this information available to the Illinois EPA upon request.

2. The Permittee must provide real time computer access to the operation and monitoring of the transportable rotary kiln for all compliance data for Operating Limits (Section IV.b.D.) and Automatic Waste Feed Cut-off requirements (Section IV.b.E.) by way of a computer network as follows:

   a. Via phone line modem which provides (15) second data on a real time basis. If the phone hook-up to the FOS-Collinsville Office is interrupted, the Permittee may continue to operate the incinerator as long as all compliance data is retained.

3. Except for stack gas flow rate and waste feed rates, the Permittee must record one minute averages of all compliance data for Operating Limits (Section IV.b.D.).

4. The Permittee must provide continuous video surveillance to document whether or not there have been any fugitive emissions from the combustion zone of the incinerator, the emergency cap, and the surge vent. The video tape must be archived thirty (30) days before it may be reused or discarded. If a video tape does not contain any video of a fugitive emission from the combustion zone of the incinerator, the emergency cap, or the surge vent, the video tape may be reused or discarded prior to the end of the thirty (30) day period.

I. TWENTY-FOUR HOUR REPORTING

1. The permittee shall report any non-compliance which may endanger health of the environment orally within 24 hours after the permittee becomes aware of the circumstances, including:

   a. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies;

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

   The description of the occurrence and its cause shall include:

   a. Name, address, and telephone number of the owner or operator;

b. Name, address, and telephone number of the facility;

c. Date, time, and type of incident;

d. Name and quantity of material(s) involved;

e. The extent of injuries, if any;

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

g. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance and its cause; the period of noncompliance including exact dates, times, and, if the noncompliance has not been corrected, the anticipated time the noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The Permittee shall orally report to the Illinois EPA's Collinsville Regional Office any other noncompliance with the conditions identified in Section IV.b.D. as soon as practicable, but in no event later than three business days after the act of noncompliance occurred. Within fifteen calendar days of the act of noncompliance, the Permittee shall notify the Illinois EPA in writing and describe the cause(s) of the claimed occurrence which caused or may cause the noncompliance, the measures taken or to be taken to prevent or minimize the noncompliance, and the timetable by which those measures will be implemented.

J. CLOSURE

At closure, all waste and waste residues shall be removed from the incinerator. Remaining equipment must be decontaminated or removed. Closure of the incinerator shall be carried out in accordance with the closure plan in the approved permit application, as modified below:

1. The Permittee shall notify the Illinois EPA's DLPC in writing of its intent to close the incinerator at least 180 days prior to the date closure is expected to begin. Along with this notification, the Permittee shall submit the sampling and analysis plan to be used in demonstrating the incinerator has been properly decontaminated. This plan shall be approved by the Illinois EPA's DLPC in writing prior to being implemented. Illinois

EPA review of this plan will be subject to the permit appeal provisions contained in Sections 39(a) and 40(a) of the Environmental Protection Act. The response from the Illinois EPA shall approve and establish:

a. The sampling plan;

b. What contaminants must be analyzed for;

c. The level at which decontamination is considered complete.

2. Sweepings collected during closure of the incinerator shall be managed as a hazardous waste. All washwater and rinsate generated during the closure of these units shall also be managed as a hazardous waste, unless it can be shown to be exempt under 35 Ill. Adm. Code 721.103(a)(2)(D).

3. The Permittee shall provide post-closure care in accordance with 35 Ill. Adm. Code Part 724 for the incinerator if all of the hazardous wastes or contaminated soils cannot be practicably removed or decontaminated in accordance with the closure requirements outlined in the permit and in the approved closure plan. If it is determined that the closure requirements cannot be met and post-closure care is required, this Permit will be modified to require post-closure care for the container storage area in accordance with 35 Ill. Adm. Code, Subtitle G, Part 724, Subparts G and H.

4. Should post-closure care, as described in Condition J.3 above, become necessary, the Permittee shall submit an application for modification to this permit, including an amended closure and post-closure care plan for this unit, within thirty (30) days following discovery that clean closure cannot be accomplished. If a determination is made to not pursue clean closure prior to the implementation of the closure plan for the container storage area, the modification request shall be made no later than sixty (60) days after the determination is made.

5. Financial assurance for closure and post-closure of the incinerator, if required in accordance with Conditions J.3 and J.4 above, shall be provided within thirty (30) days following modification of the permit under the provisions of Condition J.4 above.

6. Within sixty (60) days after closure of the incinerator is complete, the Permittee shall submit certification to the Illinois EPA that the unit has been closed in accordance with the approved closure plan.

The closure certification forms in Attachments C-1 or C-2 to this permit or a certification with identical wording must be used. Signatures must meet the

requirements of 35 Ill. Adm. Code Section 702,126. The independent engineer (registered in the State of (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the incinerator until the Illinois EPA approves the closure certification for the unit. The Illinois EPA's review of closure certifications for partial or final closure will be conducted in accordance with 35 Ill. Adm. Code 724.243.

A Closure Documentation Report is to be submitted with the closure certification which includes the following items, if applicable:

a. The volume of waste and waste residue removed, including wastes resulting from decontamination activities.

b. A description of the method of waste handling and transport.

c. Copies of the waste manifests.

d. A description of the sampling and analytical methods used.

e. A chronological summary of closure activities and the cost involved.

f. Tests performed, methods and results.

g. Color photographs of closure activities which document conditions before, during and after closure.

K. POWDERED ACTIVATED CARBON INJECTION SYSTEM/LINE RECIRCULATION SYSTEM

1. The permittee shall submit a permit modification request within 30 days after the test results of the performance testing identified in your application Log B-29-M-112 are compiled and finalized. This modification request must identify the operating conditions for the carbon injection/lime recirculation system and request incorporation of these conditions into the RCRA Part B Permit.

2. The permittee shall provide written notice of planned emission tests to the Illinois EPA's Bureau of Land Field Operations Section, Collinsville Office within 5 days prior to the scheduled test date.

3. The permittee shall provide test results from emissions testing within 14 days after the test results are compiled and finalized.

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SECTION V. MATERIALS PROCESSING

SPECIAL CONDITIONS

1. The bulk solids transporter shall be covered unless it is being sampled, or waste is being added or removed.

2. The Permittee shall not process a drum of waste in the drum auger unit if the drum contains free liquids as determined by 35 Ill. Adm. Code 729.320.

3. Containers may be staged on the incinerator dock for no longer than 24 hours awaiting incineration before they must be returned to a permitted storage area.

4. The Permittee shall remove all waste and/or precipitation collected in the secondary containment systems of these units within 24 hours of discovery.

5. The Permittee may operate a gas cylinder bubbling process at the glove box emission control system. This approval to operate this system does not release the Permittee from any requirements under the Clean Air Act.

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SECTION VI

SPECIAL CONDITIONS

1. Within 60 days of the date of this permit, the permittee shall submit a permit modification to amend the contingency plan to address incidents where flooding may occur at the facility.

2. All wastes carrying the codes D037 or F032 must be screened and handled in accordance with the Veolia dioxin analysis policy.

3. Mandatory analysis must be conducted on each individual phase of a multi-phase waste stream unless the permittee uses the following mercury analytical method: mercury in solids and solutions by thermal decomposition, amalgamation, and atomic absorption spectrophotometry.

4. The waste stream profile must include a measured pH of a representative sample of the waste or identify a pH range not to exceed four standard units. Waste identified with a single pH on the profile shall be considered nonconforming if the pH is greater than or less than two standard units of the profile value. Waste identified with a four standard unit pH range on the profile shall be considered nonconforming if the pH is greater than or less than the specified range.

   The waste stream profile must include a specification of the total number and type of possible phases expected in the waste stream. Waste shall be considered nonconforming if the number or type of observed phases differs with the number or type indicated on the profile.

5. The following wastes shall not be received or incinerated at Veolia.

Hazardous Waste Number	Compound	Reason
	Radioactive Wastes	
	Thorium Compounds	
	Uranium Compounds	
D006	NiCad Batteries	

D008	Lead Acid Batteries	
K069	Non-calcium Sulfate	
P009	Ammonium picrate	Compressed gas
P031	Cyanogen	Compressed gas
P033	Cyanogen chloride	Compressed gas
P056	Fluorine	Compressed gas
P063	Hydrogen cyanide	Compressed gas
P095	Phosgene	Compressed gas
P096	Phosphine	Compressed gas
U134	Hydrogen fluoride	Compressed gas
F020	Tri-, or tetrachlorophenols	Dioxins
F021	Pentachlorophenol	Dioxins
F022	Tetra-, penta-, or hexachlorobenzenes	Dioxins
F023	Tri-, or tetrachlorophenols	Dioxins
F026	Tetra-, penta-, or hexa-chlorobenzenes	Dioxins
F027	Tri-, tetra-, or pentachlorophenols	Dioxins
F028	Soils/residues from F020-F027	Dioxins
	Asbestos Wastes	Carcinogen
	Polychlorinated biphenyls (PCB) greater than 50 ppm	Dioxins
	"Source, special nuclear, or by product material as defined	

by the Atomic Energy Act of 1954,
42 U.S.C. 2011 et seq. or
radioactive material discarded
in accordance with Ill. Rev. Stat.
ch. 111 1/2, Sec. 230.1 et seq."

*The permittee may accept acetylene gas cylinders containing non-friable asbestos provided the non-friable asbestos was placed in the cylinders as part of a safety procedure; and the cylinders are only accepted for the direct injection of acetylene into the incinerator. The permittee shall dispose of the empty cylinders in an appropriate landfill or send them back to the generator for reuse. The permittee is prohibited from incinerating the cylinders.

Note: See Condition IV.B for additional conditions on wastes acceptance or incineration of waste.

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SECTION VII. SUBPART X UNIT

The permittee may operate the Glove Box Emission Control System that has capacity of 3300 gallons per day, based on 24/hours/day, 7 days/week operation. (60-55 gallons drums per day). This system utilizes two glove boxes, one for handling drums, and a transportable glove box for lab pack quantities.

1. All air emissions from the glove boxes must be routed through the port on the upper chamber of Incinerator No. 3.

2. The permittee may only operate the glove box when incinerator #3 is operating in accordance with the conditions of this permit.

3. All charges prepared within the glove box must be closed prior to removing them from the boxes.

4. The glove boxes are subject to the Container Air Emission Control conditions found in Section X of this permit because they most closely resemble containers.

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SECTION VIII. SUBPART BB

The permittee must comply with the applicable Subpart BB standards for pumps in light liquid service (35 Ill. Adm. Code 724.952) compressors (35 Ill. Adm. Code 724.953), pressure release devices in gas-vapor service (35 Ill. Adm. Code 724.954), sampling connecting system (35 Ill. Adm. Code 724.955), open-ended valves or lines (35 Ill. Adm. Code 724.956), valves in gas/vapor service or in light liquid service (35 Ill. Adm. Code 724.957), pumps and valves in heavy liquid service, pressure relief devices in light liquid service, and flanges and other Connectors (35 Ill. Adm. Code 724.958) for all equipment listed in Section O, Volume 1 of the approved permit application. Each piece of equipment to which this Section applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

I. Pumps in light liquid service

1. Each pump in light liquid service must be monitored monthly to detects leaks by the methods specified below:

   a. monitoring must comply with Reference Method 21 in 40 CFR 60.

   b. the detection instrument must meet the performance criteria of Reference Method 21. The instrument must be calibrated before use on each day of its use by the procedures specified in this method.

   c. calibration gases must be:

      A. zero air (less than 10 ppm of hydrocarbon in air)

      B. a mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.

   d. The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

2. A leak is detected from a pump in light liquid service when an instrument reading of 10,000 ppm or greater is measured or there are indications of liquids dripping from the pump seal.

3. When a leak is detected from a pump in light liquid service, it must be repaired as soon as possible, but not later than 15 calendar days after it was detected. A first attempt at repair must be made no later than 5 calendar days after each leak is detected.

II. Pressure relief devices in gas-vapor service

1. Except during pressure releases, each pressure relief valve in gas-vapor service must be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background.

2. after each pressure release, the pressure relief device must be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later then 5 calendar days after each pressure release.

3. No later than 5 calendar days after the pressure release, the pressure relief device must be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background.

III. Valves in Gas/Vapor or Light Liquid Service

1. Each valve in gas-vapor or light liquid service must be monitored monthly to detect leaks by the methods specified in I(1) above.

2. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

3. When a leak is detected, it must be repaired as soon as practicable, but no later than 15 days after the leak is detected. A first attempt at repair must be made no later than 5 days after each leak is detected.

IV. Pumps, Valves, Pressure Relief Devices and other connectors

1. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors must be monitored within 5 days by the methods specified in I(1) above, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

2. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

3. When a leak is detected, it must be repaired as soon as practicable, but no later than 15 days after the leak is detected. A first attempt at repair must be made no later than 5 days after each leak is detected.

V. Skip Period Alternate for Valves

1. An owner or operator shall comply with the requirements for valves, as described in 35 IAC 724.957 except as described below.

2. After two consecutive quarterly leak detection periods with the percentages of valves leaking equal to or less than two percent, the permittee may begin to skip one of the quarterly leak detection periods for the valves subject to 35 IAC 724.957.

3. After five consecutive quarterly leak detection periods with the percentages of values leaking equal to or less than two percent, the permittee may begin to skip three of the quarterly leak detection periods for the valves subject to 35 IAC 724.957.

4. If the percentage of valves leaking is greater than 2 percent, the permittee shall monitor monthly in compliance with the requirements in Sections 35 IAC 724.957, but may again elect to use the skip period alternative after meeting the requirements of 35 IAC 724.957(c)(1).

VI. Reporting Requirements

1. The permittee must submit a semi-annual report to the Illinois EPA by June and December of each year. The report must include the following information:

   a. The USEPA identification number, name and address of the facility.

   b. For each month during the semiannual reporting period:

      A. The equipment identification number of each valve for which a leak was not repaired as required in 35 Ill. Adm. Code 724.957(d).

      B. The equipment identification number of each pump for which a leak was not repaired as required by 35 Ill. Adm. Code 724.952(c) and (d)(6).

   c. Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period.

   d. For each month during the semiannual reporting period, dates when the control device installed as required by 35 Ill. Adm. Code Sections 724.952 through 724.955, exceeded or operated outside of the design specifications

as defined in 35 Ill. Adm. Code 724.964(e) and as indicated by the control device monitoring required by 35 Ill. Adm. Code 724.960 and was not corrected within 24 hours, the duration and cause of each exceedance, and any corrective measure taken.

2. If during the semiannual reporting period, leaks from valves and pumps are repaired as required by 35 Ill. Adm. Code Sections 724.957(d), 724.952(c) and (d)(6) and the control device does not exceed or operate outside of the design specifications as defined in 35 Ill. Adm. Code 724.964(e) for more than 24 hours, a report to the Illinois EPA is not required.

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SECTION IX. SUBPART CC

For the purposes of Subpart CC Air Emission Standards the Subpart X Miscellaneous Unit shall be considered a container. (35 IAC 724.701)

A. For proposed tanks

The permittee shall determine the maximum organic vapor pressure for hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 724.983(c). The permittee shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in 35 Ill. Adm. Code 724.984(b)(1)(A), as applicable to the tank.

The permittee shall design, operate and maintain each tank with a fixed roof designed to meet the specifications in 35 Ill. Adm. Code 724.984(c)(2).

B. The permittee shall operate each tank identified in condition III.B.1 with each closure device secured in the closed position except to provide access to the tank for performing routine inspections and maintenance, to maintain the tank internal pressure in accordance with the tank design specifications, or for the opening of a safety device to avoid an unsafe condition.

For each tank identified in condition III.B.1 the permittee shall inspect air emission control equipment in accordance with the following:

1. The fixed roof and its closure devices must be visually inspected to check for defects that could result in air pollution emissions.
2. An initial inspection of the fixed roof and its closure devices must be performed on or before the date that the tank becomes subject to Subpart CC. Thereafter, the permittee shall perform the inspections at least once every year.
3. In the event a defect in the air emission control equipment is detected, the permittee shall repair the defect in accordance with condition X.E.
4. The permittee shall maintain a record of the inspection in accordance with 35 Ill. Adm. Code 724.989(b).

C. Whenever a waste is in the tank, the permittee shall not operate the fixed roof tanks identified in condition III.B.1 unless each closure device has been secured in the closed position and the vapor headspace underneath the fixed roof has been vented to the control device except as follows:

1. To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
2. To remove accumulated sludge or other residue from the bottom of a tank.
3. To open a safety device to avoid an unsafe condition.

The permittee shall inspect and monitor the air emission control equipment in accordance with the following procedure:

1. The fixed roof and its closure devices must be visually inspected by the permittee to check for defects that could result in air pollutant emissions.
2. The closed vent system and control device must be inspected and monitored by the permittee in accordance with the procedures specified in 35 Ill. Adm. Code 724.987.
3. The permittee shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to Subpart CC. Thereafter, the permittee shall perform the inspections at least once every year except for the special conditions provided for in 35 Ill. Adm. Code 724.984(l).
4. In the event a defect is detected, the permittee shall repair the defect in accordance with the requirements of condition X.E.
5. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 35 Ill. Adm. Code 724.989.

D. For pressure tanks

Whenever a hazardous waste is in the tank, the permittee must operate the tank as a closed system that does not vent to the atmosphere except in the event that a safety device is required to open to avoid an unsafe condition.

E. Repair Condition

The permittee shall repair each defect detected during an inspection as follows:

1. The permittee shall make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible but no later than 45 calendar days after a detection.
2. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the permittee shall repair the defect the next time the process or unit that is generating the

hazardous waste managed in the tank stops operation. Repair of the defect must be completed before the process or unit resumes operation.

F. Level 1 and/or Level 2 containers

Whenever hazardous waste is in a container using Container Level 1 or 2 controls, the permittee shall install all covers and closure devices for the container and secure and maintain each closure device in closed position except:

1. Opening of a closure device or cover for a container is allowed for the purposes of adding/removing hazardous waste or material as follows:
   a. In the case where the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers upon conclusion of the filling operation.
   b. In the case where discrete quantities or batches of material intermittently are added to the container over a period of time, the permittee shall promptly secure the closure devices in the closed position and install covers upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
   c. An empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time.
   d. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 35 Ill. Adm. Code 721.107(b), the permittee shall promptly secure the closure devices in the closed position and install covers upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
2. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste.
3. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications.
4. Opening of a safety device is allowed at any time conditions require doing so to avoid an unsafe condition.

G. The permittee shall inspect the containers and their covers and closure devices as follows:

1. In the case when a hazardous waste already is in the container at the time the permittee first accepts possession of the container at the facility and the container in not emptied within 24 hours after the container is accepted at the facility, the permittee shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility.
2. In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the permittee shall visually inspect the container and its cover and closure device initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.
3. When a defect is detected for the container, cover, or closure devices, the permittee shall make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible butt no later than five calendar days after detection. If repair cannot be completed with five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

H. Level 3 Containers

The permittee shall inspect and monitor the closed-vent systems and control devices as specified in 35 Ill. Adm. Code 724.987.

I. Reporting Requirements

For tanks using air emission control device

The permittee shall report to the Agency each occurrence when hazardous waste is managed in the tank in noncompliance with the conditions specified in 35 Ill. Adm. Code 724.984(b). The permittee shall submit a written report within 15 calendar days of the time that the permittee becomes aware of the occurrence. The written report shall contain the USEPA identification number, the facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the permittee.

J. For control devices in 724.987

1. The permittee shall submit a semiannual written report to the Agency for control devices used in accordance with 35 Ill. Adm. Code 724.987, except as provided condition X.J.2 below. The report shall describe each occurrence during the previous 6-month period when either of the two following events occurs: a control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in 35 Ill. Adm. Code 724.935(c)(4) or a flare is operated with visible emissions for five minutes or longer in a two-hour period, as defined in 35 Ill. Adm. Code 724.933(d). The written report shall include the USEPA identification number, the facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of the permittee.
2. A report to the Agency is not required for a 6-month period during which all control devices subject to Subpart CC are operated by the permittee so that both of the following conditions result: during on period of 24 hours or longer did a control device operate continuously in noncompliance with the applicable operating values defined in Section 724.935(c)(4) and no flare was operated with visible emissions for five minutes or longer in a two-hour period, as defined in Section 724.933(d).

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SECTION X
CORRECTIVE ACTION

A. INTRODUCTION

1. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents from any solid waste management unit (SWMU) at its facility in Sauget, Illinois. This section contains the conditions which must be followed to ensure these requirements are met.

2. The original RCRA permit for this facility, issued on March 31, 1988 an Illinois EPA component and a USEPA component. Among other things, the USEPA component of the original permit contained corrective action requirements for the SWMUs of concern at this facility. A soil investigation effort has been completed at this facility as part of these requirements.

3. Illinois EPA now has authority for imposing corrective action requirements at RCRA permitted facilities and will be responsible for overseeing future corrective action activities at this facility.

4. The Permittee must provide corrective action, as appropriate, for any future releases from SWMUs present at the facility.

B. CORRECTIVE ACTION REQUIREMENTS

A drawing showing the layout of this facility is shown in Attachment J. To properly address any soil contamination which may be present at the facility, the following requirements must be met:

1. An engineered barrier (minimum thickness of four inches) constructed of asphalt, concrete and/ or crushed limestone shall be established and maintained over Area 1 shown in Attachment J. An environmental land use control (ELUC) meeting the requirements of 35 Ill. Adm. Code 742, Subpart J must also be established to ensure the engineered barrier is properly maintained in the future.

   A detailed description of the proposed barrier must be submitted to Illinois EPA within ninety days of the effective date of this permit. The information submitted to Illinois EPA must include: (1) a description of the characteristics and

construction details of the barrier; (2) plans and specifications for the barrier; and (3) scaled drawings showing the horizontal and vertical boundaries of the barrier.

2. The ELUC identified in Condition XI.B.1 above must also contain the following restrictions regarding any future construction/excavation efforts conducted at the facility (both Areas 1 and 2 shown in Attachment J):

   a. A requirement that a site safety plan meeting the requirements of 29 CFR be developed and implemented any time construction/excavation work takes place in the soil present at the facility. Among other things, this plan must properly restrict worker exposure and any other person's exposure to the soil;

   b. A requirement that any soil removed from the site be managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.

3. The ELUC identified in Condition XI.B.1. above must also restrict the entire property of the facility, i.e., both Areas 1 and 2 to commercial/industrial use.

4. A proposed ELUC meeting the requirements of this section and 35 Ill. Adm. Code 742, Subpart J must be submitted to Illinois EPA within ninety days of the effective date of this permit. Illinois EPA's internet site (www.epa.state.il.us) contains guidance regarding proposed institutional controls, including a model environmental land use control.

5. The portion of the ELUC associated with continued maintenance of the engineered barrier must clearly include the following information and restrictions:

   a. A statement that contaminated soil may be present at the site, but does not pose a threat to human health or the environment, provided an engineered barrier remains over Area 1 and the restrictions set forth in the institutional control are met;

   b. A scaled drawing showing the boundaries of the required engineered barrier, relative to the property boundaries at the site;

   c. A description of the construction details of the required engineered barrier;

   d. A requirement that the engineered barrier be properly maintained in a future;

6. 35 Ill. Adm. Code 742.1010(d)(8) requires that an ELUC contain scaled maps which show information about the facility, any remaining contamination at the facility and any physical features at the facility to which the ELUC applies.

   a. The required scaled site maps must specifically show:

      (1) the legal boundaries of the property to which the ELUC applies;

      (2) Any physical features to which an ELUC applies (e.g., engineered barriers, monitoring wells, caps); and

      (3) The nature, location of the source, and direction of movement of the contaminants of concern.

   b. Exhibit B of the model ELUC developed by Illinois EPA is comprised of the maps necessary to meet the requirements of 35 Ill. Adm. Code 742.1010(d)(8). In developing such an exhibit for the required ELUC:

      (1) If only one drawing is used to present all the required information, then it must be clearly labeled as Exhibit B to the ELUC in question. Many times however, it will be necessary to include more than one drawing in Exhibit B to meet the requirements of the requirements of 35 Ill. Adm. Code 742.1010(d)(8). In such cases, each map shall be given a unique Exhibit Number (i.e., Exhibit B-1, B-2, B-3, etc.) and labeled as such.

      (2) A cover sheet must be provided for the exhibit which: (a) lists the types of scaled maps that must be provided in the ELUC as required in 35 Ill. Adm. Code 1010(d)(8); (b) identifies the map within the exhibit which addresses the individual requirements of 35 Ill. Adm. Code 742.1010(d)(8)(A), (B), (C) and (D); and (c) lists the maps which comprise the exhibit by name and number.

      (3) The Real Estate Tax Index/Parcel Index Number (PIN) of the property in question must be contained on each map in Exhibit B.

7. Failure to comply with the limitations or requirements of an ELUC may result in voidance of an Agency no further remediation determination in accordance with the program under which the determination was made. The failure to comply with the limitations or requirements of an ELUC may also be grounds for an enforcement action pursuant to Title VIII of the Illinois Environmental Protection Act.

8. The limitations or requirements of the ELUC apply in perpetuity or until:

   a. The Illinois EPA issues a new no further remediation determination approving modification or removal of the limitation/requirement; and

   b. A release or modification of the land use limitation is filed on the chain of title for the property that is the subject of the ELUC.

9. At no time shall this site be used in a manner inconsistent with the land use limitations established in the approved ELUC, unless: (1) attainment of objectives appropriate for the new land use is achieved, and (2) a new no further action determination is obtained from Illinois EPA and subsequently recorded in accordance with 35 Ill. Adm. Code 742.

   a. Requests to release or modify an ELUC must be formally requested in writing from Illinois EPA as a: (1) request to amend the certification of closure; or (2) a permit modification request. Sufficient information must be provided in these requests to demonstrate that the requested change meets all the requirements of 35 IAC 742.

   b. Any final approval by Illinois EPA of a request to release or modify an ELUC must be filed with the chain of title for the subject facility.

C. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such a cost estimate will be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201 and this permit.

   a. Each corrective action related document submitted to Illinois EPA must contain an estimate of the cost for carrying out the efforts described in the document and for completing corrective action overall.

   b. The required cost estimates must be based on the costs of hiring a third party to carry out the required activities. This detailed estimate must include: (1) a detailed description of the various tasks to be carried out; (2) the estimated cost of carrying out each task; (3) the actual amount of

resources needed to complete each task, as well as the unit cost associated with each required resource; and (4) justification for all values used in calculating the overall cost estimate.

c. Proposed details for an engineered barrier and a proposed ELUC are to be submitted within ninety days of the effective date of this permit. The submittal of these proposals must also contain cost estimates for establishing the required barrier and ELUC. These are the only required corrective action efforts which must still be completed at this time.

d. It will be necessary to submit proposed cost estimates in the future associated with investigating/remediating any new SWMUs or releases from existing SWMUs in accordance with Subsection D below.

2. The Permittee shall demonstrate continuous compliance with the financial assurance requirements of 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition XI.e.1 above. The words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the Agency's approval of the initial or revised cost estimates required under Condition XI.c.1 above. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that acceptable under 35 IAC 724.246 at its discretion.

D. RESPONSE TO NEWLY-IDENTIFIED SWMUs AND NEW RELEASES FROM EXISTING SWMUs

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than thirty (30) calendar days after discovery. Such a notification must also be made if the Permittee discovers that a release has occurred from a SWMU which did not require corrective action/measures at the time that the RFA or RFI was completed. The notification shall provide the following information, as available:

a. The location of the SWMU of concern in relation to the facility property boundaries on a scaled map or drawing;

b. The type and past and present function of the unit;

c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);

d. The period during which the unit was operated;

e. Information regarding the characteristics of all materials available that have been or are being managed at the SWMU, to the extent;

f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit; and

g. Information regarding any releases from the SWMU.

2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the SWMU, the Agency's DLPC may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan.

3. Within 90 calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall submit a SWMU Assessment Plan. This SWMU Assessment plan must propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the SWMU(s) to the environment.

4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with conditions or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty-five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies specify a due date for submittal of a revised plan.

5. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Agency's DLPC in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.

6. The Permittee must implement a Corrective Measures Program, as necessary, to properly address any contamination encountered during the assessment.

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Attachment A

GENERAL REQUIREMENTS

1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 Ill. Adm. Code 702.181)

2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 Ill. Adm. Code 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 Ill. Adm. Code 702.146)

3. 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. (35 Ill. Adm. Code 700.107)

4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 Ill. Adm. Code 702.160)

5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 Ill. Adm. Code 702.141 and 703.242)

6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Illinois EPA. (35 Ill. Adm. Code 702.142 and 703.125)

7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 Ill. Adm. Code 703.181-703.209) and through no fault of the Permittee the Illinois EPA has not issued a new permit as set forth in 35 Ill. Adm. Code 702.125.

8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 Ill. Adm. Code 702.143)

9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 Ill. Adm. Code 702.144)

10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 Ill. Adm. Code 702.145)

11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to the Illinois EPA, within a reasonable time, any relevant information which the Illinois EPA may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Illinois EPA, upon request, copies of records required to be kept by this permit. (35 Ill. Adm. Code 702.148)

12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of the Illinois EPA, upon the presentation of credentials and other documents as may be required by law, to:

    a. 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 conditions of this permit;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 Ill. Adm. Code 702.149)

13. MONITORING AND RECORDS. (35 Ill. Adm. Code 702.150)

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 Ill. Adm. Code 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; or an equivalent method as specified in the approved Waste Analysis Plan.

b. The Permittee shall 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, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Illinois EPA at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

c. Records of monitoring information shall include:

i. The date(s), exact place, and time of sampling or measurements;

ii. The individual(s) who performed the sampling or measurements;

iii. The date(s) analyses were performed;

iv. The individual(s) who performed the analyses;

v. The analytical technique(s) or method(s) used; and

vi. The result(s) of such analyses. (35 Ill. Adm. Code 702.150)

14. REPORTING PLANNED CHANGES. The permittee shall give notice to the Illinois EPA as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of

hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:

a. The permittee has submitted to the Illinois EPA by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

b.

1. The Illinois EPA has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or

2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Illinois EPA of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 Ill. Adm. Code 703.244 and 702.152(a))

15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Illinois EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. (35 Ill. Adm. Code 702.152(b))

16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to the Illinois EPA. The Illinois EPA may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 Ill. Adm. Code 702.152(c))

17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 Ill. Adm. Code 702.152(d))

18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 Ill. Adm. Code 702.162. (35 Ill. Adm. Code 702.152(e))

19. TWENTY-FOUR HOUR REPORTING.

a. The Permittee shall report to the Illinois EPA any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:

i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.

ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.

b. The description of the occurrence and its cause shall include:

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 applicable; and

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

c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Illinois EPA may waive the five day written notice requirement in favor of a written report within fifteen days. (35 Ill. Adm. Code 702.152(f) and 703.245(b))

20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 Ill. Adm. Code 702.152(g))

21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit

application or in any report to the Illinois EPA, the Permittee shall promptly submit such facts or information. (35 Ill. Adm. Code 702.152(h))

22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):

    a. Manifest discrepancy report: if a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Illinois EPA a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 Ill. Adm. Code 724.172(b))

    b. Unmanifested waste report: The permittee must submit to the Illinois EPA within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 Ill. Adm. Code 724.176)

    c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 Ill. Adm. Code 724.175)

23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

    Illinois Environmental Protection Illinois EPA
    Division of Land Pollution Control #24
    Reporting and Financial Assurance Unit
    1021 North Grand Avenue East
    Post Office Box 19276
    Springfield, Illinois 62794-9276

24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Illinois EPA shall be signed and certified as required by 35 Ill. Adm. Code 702.126. (35 Ill. Adm. Code 702.151)

25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 Ill. Adm. Code 702.103 and 35 Ill. Adm. Code 161.

26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:

    a. Waste analysis plan as required by 35 Ill. Adm. Code 724.113(b) and this permit.

    b. Personnel training documents and records as required by 35 Ill. Adm. Code 724.116(d) and this permit.

    c. Contingency plan as required by 35 Ill. Adm. Code 724.153(a) and this permit.

    d. Closure plan as required by 35 Ill. Adm. Code 724.212(a) and this permit.

    e. Cost estimate for facility closure as required by 35 Ill. Adm. Code 724.242(d) and this permit.

    f. Operating record as required by 35 Ill. Adm. Code 724.173 and this permit.

    g. Inspection schedules as required by 35 Ill. Adm. Code 724.115(b) and this permit.

GENERAL FACILITY STANDARDS

27. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify the Illinois EPA in writing at least four weeks in advance of the date the waste is expected at the facility. (35 Ill. Adm. Code 724.112(a))

28. NOTICE OF WASTE FROM OFF-SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 Ill. Adm. Code 724.112(b))

29. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the approved waste analysis plan. (35 Ill. Adm. Code 724.113)

30. SECURITY. The Permittee shall comply with the security provisions of 35 Ill. Adm. Code 724.114(b) and (c).

31. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction

discovered by an inspection as required by 35 Ill. Adm. Code 724.115(c). Records of inspections shall be kept as required by 35 Ill. Adm. Code 724.115(d).

32. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 Ill. Adm. Code 724.116 and shall maintain training documents and records as required by 35 Ill. Adm. Code 724.116(d) and (e).

33. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE. The Permittee shall comply with the requirements of 35 Ill. Adm. Code 724.117.

PREPAREDNESS AND PREVENTION

34. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 Ill. Adm. Code 724.131)

35. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the approved contingency plan, as required by 35 Ill. Adm. Code 724.132.

36. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 Ill. Adm. Code 724.133)

37. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 Ill. Adm. Code 724.134.

38. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 Ill. Adm. Code 724.135 and National Fire Protection Association (NFPA) requirements.

39. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response teams and emergency response contractors and equipment suppliers as required by 35 Ill. Adm. Code 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

facility operation plans or facility design affects the closure plan pursuant to 35 Ill. Adm. Code 724.212(c).

49. NOTIFICATION OF CLOSURE. The Permittee shall notify the Illinois EPA at least 60 days prior to the date it expects to begin closure. (35 Ill. Adm. Code 724.212(d))

50. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 Ill. Adm. Code 724.213)

51. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 Ill. Adm. Code 724.214) plan.

52. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to the Illinois EPA in accordance with 35 Ill. Adm. Code 724.215 that the facility has been closed as specified by the approved closure plans.

53. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 Ill. Adm. Code 724.242, must be:

    a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.

    b. Revised whenever there is a change in the facility's closure plan increasing the cost of closure.

    c. Kept on record at the facility and updated. (35 Ill. Adm. Code 724.242)

54. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 Ill. Adm. Code 724.243 by providing documentation of financial assurance, as required by 35 Ill. Adm. Code 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Illinois EPA pursuant to 35 Ill. Adm. Code 724.243.

55. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 Ill. Adm. Code 724.247 and the documentation requirements of 35 Ill. Adm. Code 724.251.

56. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 Ill. Adm. Code 724.248 whenever necessary.

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STANDARD ATTACHMENT B
REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to highlight the various reporting and notification requirements of this permit. Additional compliance schedule dates are located in Section VII.

Condition	Submittal	Due Date
CONTAINER STORAGE		
H.1	Notify Illinois EPA of closure.	Within 180 days of the expected date of closure.
H.1	Submit soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
H.4	Submit application for modification of permit and post-closure care plan.	30 days after determination that the container storage areas must be closed as a landfill.
H.6	Submit certification for closure of the container storage areas.	60 days after closure of the storage areas is complete.
TANK SYSTEMS		
G.1	Notify Illinois EPA of a leak or spill.	24 hours after leak or spill occurs.
G.2	Report to Illinois EPA on release and Permittee's response.	30 days after leak or spill occurs.
H.1	Notify the Illinois EPA of closure.	180 days prior to expected date of closure.
H.1	Submit soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.

H.4	Submit application for modification of permit and post-closure care plan.	30 days after determination that the tank systems must be closed as landfills.
H.6	Submit certification for closure of tank systems.	60 days after closure of the tanks is complete.

INCINERATION

Sections IV, IV.a, IV.b

J.1	Notify the Illinois EPA of closure.	180 days prior to expected date of closure.
J.1	Submit soil sampling and analysis plan for review.	At least 180 days prior to commencement of closure.
J.4	Submit application for modification of permit and post-closure care plan.	30 days after determination that the incinerators must be closed as landfills.
J.6	Submit certifications for closure of incinerators.	60 days after closure of the incinerators is complete.

STANDARD CONDITIONS

6	Complete application for new permit.	180 days prior to permit expiration.
11	Information requested by Illinois EPA and copies of records required to be kept by this permit.	Reasonable time.
14	Notify Illinois EPA of planned physical alterations or additions.	15 days prior to planned change.
15	Notify Illinois EPA of changes which may result in permit noncompliance.	

16	Application for permit modification indicating permit is to be transferred.	90 days before the scheduled change.
18	Submission of any information required in a compliance schedule.	14 days after each scheduled date.
19	Report to Illinois EPA any non-compliance which may endanger health or environment.	
	telephone	24 hours after discovery.
	in writing	5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
27	Notify Illinois EPA in writing of expected receipt of hazardous waste from foreign source.	4 weeks prior to receipt of waste.
40	Implementation of Contingency Plan.	
	Notify appropriate state and local agencies with designated response roles.	As needed.
	Notify appropriate local officials.	Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify the Illinois EPA (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines there has been a release, fire or explosion which could threaten human health or the environment, outside the facility.	Immediately after determination made.
	Notify Illinois EPA and appropriate state and local authorities, in writing	Prior to resuming operation in

CONTINGENCY PLAN

40. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion, or release of hazardous waste or constituents which threaten human health or the environment. (35 Ill. Adm. Code 724.151(b)) At a minimum, this includes any fire or explosion which occurs in an area where hazardous waste is being managed (treated, stored, or disposed).

    Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Illinois EPA as required by 35 Ill. Adm. Code 724.156(j).

41. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 Ill. Adm. Code 724.153.

42. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 Ill. Adm. Code 724.154.

43. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 Ill. Adm. Code 724.155.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

44. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 Ill. Adm. Code 724.171, 724.172 and 724.176.

45. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 Ill. Adm. Code 724.173.

46. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Illinois EPA prior to March 1st of each year in accordance with the requirements of 35 Ill. Adm. Code 724.175.

CLOSURE

47. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 Ill. Adm. Code 724.211 and in accordance with the approved closure plan.

48. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the

	that facility is in compliance with 35 Ill. Adm. Code 264.156(h).	affected areas.
	Report to Illinois EPA details regarding incident which required implementation of contingency plan.	15 days after event.
46	Submit annual report required by 35 Ill. Adm. Code 724.175.	March 1 of each year.
48	Application for permit modification amending closure plan.	
49	Notify Illinois EPA that expecting to close.	180 days prior to beginning closure.
53(a)	Adjust closure cost estimate for inflation.	Within 60 days prior to anniversary date.
53(b)	Revision of closure cost estimate.	As needed.
54	Change in financial assurance mechanism for closure.	90 days prior to the change.
55	Change in coverage for sudden and non-sudden accidental occurrences.	90 days prior to the change.
56	Notify Illinois EPA of commencement of voluntary or involuntary bankruptcy proceedings.	10 days after commencement of proceeding.

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ATTACHMENT C-1

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

The hazardous waste management unit (identify unit) at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number	Facility Name
Signature of Owner/Operator	Name and Title
Signature of Registered P.E.	Name of Registered P.E. and Illinois Registration Number
Date	

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ATTACHMENT C-2

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

The hazardous waste management unit (identify unit) at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The Owner/Operator hereby certifies that he has recorded the notation specified in 35 Ill. Adm. Code, Section 724.219(b)(1) as amended February 5, 1987.

USEPA ID Number	Facility Name
Signature of Owner/Operator	Name and Title
Signature of Registered P.E.	Name of Registered P.E. and Illinois Registration Number
Date	

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ATTACHMENT D
APPROVED PERMIT APPLICATION

Section II: List of Required Plans and Documents Contained in the Approved Permit Application

Plan		Location
1.	Waste Analysis Plan	Volume 5
2.	Inspection Plan	Volume 5
3.	Contingency Plan	Volume 5
4.	Closure Plan	Volume I, Section I
5.	Training Plan	Volume 5
6.	Detailed Design Plans and Specifications for Container Storage	Volume I, Section D. and Volume 2
7.	Detailed Design Plans and Specifications for Tank Systems	Volume I, Section D. and Volume 2
8.	Detailed Design Plans and Specifications for Fixed Hearth Incinerators	Volume 1, Section D.5 and Volume 2
9.	Detailed Design Plans and Specifications for the 50 Million BTU/hr Transportable Rotary Kiln Incinerator	Volume 1, Section D.5 and Volume 2
10.	Temporary initial screening protocol.	May 30, 2003.

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Attachment E
List of Approved Wastes

Waste No.	Description of Hazardous Waste
D001	Solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste
D002	Solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste.
D003	Solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste.

The following solid wastes exhibiting the characteristic of TCLP for:

D004	Arsenic at 5.0 mg/l or more
D005	Barium at 100 mg/l or more
D006	Cadmium at 1.0 mg/l or more
D007	Chromium at 5.0 mg/l or more
D008	Lead at 5.0 mg/l or more
D009	Mercury at 0.2 mg/l or more
D010	Selenium at 1.0 mg/l or more
D011	Silver at 5.0 mg/l or more
D012	Endrin at 0.02 mg/l or greater
D013	Lindane at 0.40 mg/l or greater
D014	Methoxychlor at 10.0 mg/l or greater
D015	Toxaphene at 0.50 mg/l or greater
D016	2,4-D at 10.0 mg/l or greater

Waste No.	Description of Hazardous Waste
D017	2,4,5-TP (silvex) at 1.0 mg/l or greater
D018	Benzene at 0.5 mg/l or greater
D019	Carbon tetrachloride at 0.5 mg/l or greater
D020	Chlordane at 0.03 mg/l or greater
D021	Chlorobenzene at 100.0 mg/l or greater
D022	Chloroform at 6.0 mg/l or greater
D023	O-Cresol at 200 mg/l or greater
D024	M-Cresol at 200 mg/l or greater
D025	P-Cresol at 200 mg/l or greater
D026	Cresol at 200 mg/l or greater
D027	1,4-dichlorobenzene at 7.5 mg/l or greater
D028	1,2-dichlorobenzene at 0.5 mg/l or greater
D029	1,1-dichloroethylene at 0.7 mg/l or greater
D030	2,4-dinitrotoluene at 0.13 mg/l or greater
D031	Heptachlor (and its epoxide) at 0.008 mg/l or greater
D032	Hexachlorobenzene at 0.13 mg/l or greater
D033	Hexachlorobenzene at 0.13 mg/l or greater
D034	Hexachlroethane at 3.0 mg/l or greater
D035	Methyl ethyl ketone at 200 mg/l or greater
D036	Nitrobenzene at 2.0 mg/l or greater

Waste No.	Description of Hazardous Waste
D037	Pentachlorphenol at 100 mg/l or greater
D038	Pyridine at 5.0 mg/l or greater
D039	tetrachlroethylene at 0.7 mg/l or greater
D040	Trichloroethylene at 0.5 mg/l or greater
D041	2,4,5-trichlorophenol at 400 mg/l or greater
D042	2,4,6-trichloroephenol at 2.0 mg/l or greater
D043	Vinyl chloride at 0.2 mg/l or greater
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons, spent solvent mixtures/blends used in degreasing, and still bottom from the recovery of these spent solvents and spent solvent mixtures.
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane, 1,1,2-trichloroethane, spent solvent mixtures and blends, and the still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-buryl alcohol, cyclohexanone, methanol, spent solvent mixtures and blends, and the still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F004	The following spent non-halogenated solvents: cresols and cresylic acid, nitrobenzene, spent solvent mixtures and blends, and still bottoms from the recovery of these spent solvents and spent solvent mixtures.
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, 2-nitropropane, spent solvent mixtures and blends, and the still bottoms from the recovery of these spent solvents and spent solvent mixtures.

Waste No.	Description of Hazardous Waste
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.
F007	Spent cyanide plating bath solutions from electroplating operations.
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons.
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, be free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

Waste No.	Description of Hazardous Waste
F032	Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section 721.135 and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.
F034	Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.
F035	Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.
F037	Petroleum refinery primary oil/water/solids separation sludge.
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge.
F039	Leachate resulting from the storage, treatment or disposal of hazardous wastes.
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003	Wastewater treatment sludge from the production of molybdate orange pigments.
K004	Wastewater treatment sludge from the production of zinc yellow pigments.
K005	Wastewater treatment sludge from the production of chrome green pigments.

Waste No.	Description of Hazardous Waste
K006	Wastewater treatment sludge from the production of chrom oxide green pigments (anhydrous and hydrated).
K007	Wastewater treatment sludge from the production of iron blue pigments.
K008	Oven residue from the production of chrome oxide green pigments.
K009	Distillation bottoms from the production of acetaldehyde from ethylene.
K010	Distillation side cuts from the production of acetaldehyde from ethylene.
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.
K015	Still bottoms from the distillation of benzyl chloride.
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
K018	Heavy ends from the fractionation column in ethyl chloride production.
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.
K022	Distillation bottom tars from the production of phenol/acetone from cumene.
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.

Waste No.	Description of Hazardous Waste
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.
K025	Distillation bottoms from the production of phthalic anhydride from naphthalene.
K026	Stripping still tails from the production of methyl ethyl pyridines.
K027	Centrifuge and distillation residues from toluene diisocyanate production.
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichlorethane.
K029	Waste from the product steam stripper in the production of 1,1,-trichloroethane.
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
K031	By-product salts generated in the production of MSMA and cacodylic acid.
K032	Wastewater treatment sludge from the production of chlordane.
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
K035	Wastewater treatment sludges generated in the production of creosote.
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.
K037	Wastewater treatment sludges from the production of disulfoton.
K038	Wastewater from the washing and stripping of phorate production.
K039	Filter cake from the filteration of diethylphosphorodithioic acid in the production of phorate.
K040	Wastewater treatment sludge from the production of phorate.

Waste No.	Description of Hazardous Waste
K041	Wastewater treatment sludge from the production of toxaphene.
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.
K043	2,6-Dichlorophenol waste from the production of 2,4-D.
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.
K045	Spent carbon from the treatment of wastewater containing explosives.
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead based initiating compounds.
K047	Pink/red water from TNT operations.
K048	Dissolved air flotation float from the petroleum refining industry.
K049	Slop oil emulsion solids from the petroleum refining industry.
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.
K051	API separator sludge from the petroleum refining industry.
K052	Tank bottoms (leaded) from the petroleum refining industry.
K060	Ammonia still lime sludge from cooking operations
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.

Waste No.	Description of Hazardous Waste
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.
K069	Emission control dust/sludge from secondary lead smelting.
K071	Brine purification muds from the mercury cell process in chlorine production, where separately pre-purified brine is not used.
K073	Chlorinated hydrocarbon waste from the purification step of the diaphram cell process using graphite anodes in chlorine production.
K083	Distillation bottoms from aniline production.
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
K085	Distillation or fractionation column bottoms from the production of chlorobenzene.
K086	Solvent washes and sludges, caustic washes and sludges or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps and stabilizers containing chromium and lead.
K087	Decanter tank tar sludge from coking operations.
K088	Spent potliners from primary aluminum reduction.
K090	Emission control dust or sludge from ferrochromiumsilicon production.
K091	Emission control dust or sludge from ferrochromium production.
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.

Waste No.	Description of Hazardous Waste
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.
K098	Untreated process wastewater from the production of toxaphene.
K099	Untreated wastewater from the production of 2,4-D.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from ars4enic or organo-arsenic compounds.
K103	Process residues from aniline extraction from the production of aniline.
K104	Combined wastewater streams generated from nitrobenzene/aniline production.
K105	Separated aqueous stream from the reactor product washing step in the production.
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazines.
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UMDH) from carboxylic acid hydrazines.
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UMDH) from carboxylic acid hydrazines.

Waste No.	Description of Hazardous Waste
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UMDH) from carboxylic acid hydrazines.
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.
K112	Reaction by-product water from the drying column in the production to toluenediamine via hydrogenation of dinitrotoluene.
K113	Condensed liquid light ends from the (T) purification of toluenediamine in the production of toluenediamine via hydrogenation dinitrotoluene.
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethane.
K118	Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K123	Process wastewater (including supernates, filtrates, and wash waters) from the production of ethylenebisdithiocarbamic acid and its salts.
K124	Reactor vent scrubber water from the production of ethylene-bisdithiobarbamic acid and its salts.
K125	Filtration, evaporation, and centrifugation of solids from the production of ethylenebisdithio carbonic acid and its salts.
K126	Baghouse dust and floor sweepings in milling and packaging operations from production or formulation of ethylenebisdithiocarbamic acid and its salts.

Waste No.	Description of Hazardous Waste
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.
K132	Spent absorbent and wastewater separator solids form the production of methyl bromide.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K140	Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-tribromophenol.
K141	Process residues from the recovery of coal tar, including, but not listed to, tar collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.
K144	Wastewater treatment sludges from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.
K145	Residues from napthalene collection and recovery operations from the recovery of coke by-products produced from coal.
K147	Tar storage tank residues from coal tar refining.
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.

Waste No.	Description of Hazardous Waste
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride.]
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes).
K158	Bag house dust, and filter/separation solids from the production of carbamates and carbamoyl oximes.
K159	Organics from the treatment of thiocarbamate wastes.
K161	Purification solids, baghouse dust and floor sweepings from the production of dithiocarbomate acids and their salts.
K169	Crude oil storage tank sediment from petroleum refining operations.
K170	Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations.
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).

K172 Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).

P006	20859-73-8	Aluminum phosphide (R, T)
U006	75-36-5	Acetyl chloride (C, R, T)
U033	353-05-4	Carbonic difluoride

K174 Wastewater treatment sludges from the production of ethylene dichloride or vinly chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (1) the sludges are disposed of in a RCRA Subtitle C (42 USC 6921-6939e) or non-hazardous landfill licensed or permitted by a state or the federal government; (2) the sludges are not otherwise placed on the land prior to final disposal; and (3) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Upon a showing by the government that a respondent in any enforcement action brought to enforce the requirements of Subtitle C of this Part managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, the respondent must demonstrate that it meets the conditions of the exclusion that are set forth above. In doing so, the respondent must provide appropriate documentation that the terms of the exclusion were met (e.g., contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.).

K175 Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.

K176 Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).

K177 Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).

K178 Solids from manufacturing and site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.

Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof:

Waste No.	Description of Hazardous Waste
P001	Warfarin, when present at concentrations greater than 0.3%.
P002	1-Acetyl-2-thiourea
P003	Acrolein
P004	Aldrin
P005	Allyl alcohol
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-Aminopyridine
P009	Ammonium picrate
P010	Arsenic acid
P011	Arsenic pentoxide
P012	Arsenic trioxide
P013	Barium cyanide
P014	Benzenethiol
P015	Beryllium dust
P016	Bis-chloromethyl) ether
P017	Bromoacetone
P018	Brucine
P020	Dinoseb
P021	Calcium cyanide
P022	Carbon bisulfide
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl) thiourea
P027	3-Chloropropionitrile
P028	Benzyl chloride
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts) not elsewhere specified.
P031	Cyanogen
P033	Cyanogen chloride
P034	4,6-Dinitro-o-cyclohexylphenol
P036	Dichlorophenylarsine
P037	Dieldrin
P038	Diethylarsine
P039	Disulfoton
P040	O,O-Diethyl O-pyrazinyl phosphoro-thioate
P041	Diethyl-p-nitrophenyl phosphate

Waste No.	Description of Hazardous Waste
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methyl-mamino)ethyl]
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	Thiofanox
P046	Ethanamine, 1,10dimethyl-2-phenyl-
P047	4,6-Dinitro-o-cresol and salts
P048	2,4-Dinitrophenol
P049	2,4-Dithiobiuret
P050	Endosulfan
P051	Endrin
P054	Ethylenimine
P056	Fluorine
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P059	Heptachlor
P060	Hexachlorohexahydro-endo, endo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P063	Hydrogen cyanide
P064	Methyl Isocyanate
P065	Fulminic acid, mercury(2+)salt
P066	Methomyl
P067	2-Methylaziridine
P068	Methyl hydrazine
P069	2-Methyllactonitrile
P070	Aldicarb
P071	Methyl parathion
P072	alpha-Naphthylthiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide
P081	Nitroglycerine
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinylamine
P085	Octamethylpyrophosphoramide
P087	Osmium oxide
P088	Endothall

Waste No.	Description of Hazardous Waste
P089	Parathion
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P094	Phorate
P095	Phosgene
P096	Phosphine
P097	Pamphur
P098	Potassium cyanide
P099	Potassium silver cyanide
P101	Propanenitrile
P102	Propargyl alcohol
P103	Selenourea
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P108	Strychnine and salts
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P112	Tetranitromethane
P113	Thallic oxide
P114	Thallium(l) selenide
P115	Thallium(l) sulfate
P116	Thiosemicarbazide
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P120	Vanadium pentoxide
P121	Zinc cyanide
P122	Zinc Phosphide ZN_3P_2
P123	Toxaphene
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-. 0-[(methylamino)carbonyl]oxime
P188	Benzoic acid, 2-hydroxy, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1)

Waste No.	Description of Hazardous Waste
P189	Carbamic acid, [(dibutylamino)thos]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester Manganese dimethyldithiocarbamate
P190	Carbamic acid, methyl-, 3-methylphenyl ester
P191	Carbamic acid, dimethyl-, 1-[dimethylamino carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P192	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1Hpyrazol-5-yl ester
P194	Ethanimidothioc acid, 2-(dimethylamino)-N-[(methylamino) carbonyl)oxy]-2-oxo-, methyl ester
P196	Manganese, bis(dimethylcarbamodithioato-S,S')-
P197	Methanimidamide, N,N-dimethyl-N□-[2-methyl-4[[(methylamino)carbony]phenyl]-
P198	Methanimidamide, N,N-dimethyl-N□-[3-[(methylamino) carbonyl]oxylphenyl]-, monohydrochloride
P199	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P202	Phenol, 3-(1-methylethyl)-, methyl carbamate 3-lsopropylphenyl N-meethylcarbamate orm-Cumenyl methylcarbamate
P203	Propanal, 2-methyl-2-(methysulfonyl)-, 0-[(methylamino)carbonyl] oxime
P204	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethyl-, methylcarbamate (ester), 3aS-cis)-
P205	Zinc, bis(dimethylcarbamodithioato-S,S□)-, (T-4)-

Commercial Chemical Products, Manufacturing Chemical Intermediates, or Off-Specification Commercial Chemical Products:

U001	Acetaldehyde
U002	Acetone
U003	Acetonitrile
U004	Acetophenone
U005	2-Acetylaminofluorene
U007	Acrylamide
U008	Acrylic acid
U009	Acrylonitrile
U010	Mitomycin C
U011	Amitrole
U012	Aniline

Waste No.	Description of Hazardous Waste
U014	Auramine
U015	Azaserine
U016	Benz(c)acridine
U017	Benzal chloride
U018	Benz(a)anthracene
U019	Benzene
U120	Fluoranthene
U021	Benzidine
U022	Benzo(a)pyrene
U123	Formic Acid
U024	Bis(2-chloroethyoxy) methane
U025	Dichloroethyl ether
U026	Chloronaphazine
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U029	Bethyl bromide
U030	Benzene, 1-bromo-4-phenoxy-
U031	N-Butyl alcohol
U032	Calcium chromate
U034	Chloral
U035	Chlorambucil
U036	Chlordane, technical
U037	Chlorobenzene
U038	Ethyl 4,4'-dichlorobenzilate
U039	4-Chloro-m-cresol
U041	1-Chloro-2,3-epoxypropane
U042	2-Chloroethyl vinyl ether
U043	Vinyl chloride
U044	Chloroform
U045	Methyl chloride
U046	Chloromethyl methyl ether
U047	beta-Chloronaphthalene
U048	o-Chlorophenol
U049	Benzenamine, 4-chloro-2-methyl-
U050	Chrysene
U051	Creosote
U052	Cresols
U053	Crotonaldehyde
U055	Cumene

Waste No.	Description of Hazardous Waste
U056	Cyclohexane
U057	Cyclohexanone
U058	Cyclophosphamide
U059	Daunomycin
U060	DDD
U061	DDT
U062	Diallate
U063	Dibenz[a,h]anthracene
U064	Dibenz[a,i]pyrene
U066	1,2-Dibromo-e-chloropropane
U067	Ethylene dibromide
U068	Methylene bromide
U069	Dibutyl phthalate
U070	o-Dichlorobenzene
U071	m-Dichlorobenzene
U072	p-Dichlorobenzene
U073	3-3'Dichlorobenzidine
U074	1,4-Dichloro-2-butene
U075	Dichlorodifluoromethane
U076	Ethylidene dichloride
U077	Ethylene dichloride
U078	1,1-Dichloroethylene
U079	1,2-Dichloroethylene
U080	Methylene chloride
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U083	1,2-Dichloropropane
U084	1,3-Dichloropropane
U085	1,2:3,4-Diepoxybutane
U086	N,N-Diethylhydrazine
U087	o,o-Diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U089	Diethylstilbestrol
U090	Dihydrosafrole
U091	3,3'-Dimethoxybenzidine
U092	Dimethylamine
U093	Dimethylaminoazobenzene
U094	7,12-Dimethylbenz[a]anthracene
U095	3,3'-Dimethylbenzidine

Waste No.	Description of Hazardous Waste
U096	2,2-Dimethylbenzylhydroperoxide
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethylhydrazine
U099	1,2-Dimethylhydrazine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U110	Dipropylamine
U111	Di-N-propylnitrosamine
U112	Ethyl acetate
U113	Ethyl acrylate
U114	Ethylenebis(dithiocarbamic acid), salts and esters
U115	Ethylene oxide
U116	Ethylene thiourea
U117	Ethyl ether
U118	Ethyl methacrylate
U119	Ethyl methanseulfonate
U120	Fluoranthene
U121	Metane, trichlorofluoro-
U122	Formaldehyde
U123	Formic acid
U124	Furan
U125	Furfural
U126	Glycidylaldehyde
U127	Hexachlorobenzene
U128	Hexachlorobutadene
U129	Lindane
U130	Hexachlorcyclopentadene
U131	Hexachloroethane
U132	Hexachlorophene
U133	Hydrazine
U134	Hydrogen fluoride
U135	Hydrogen sulfide
U136	Cacodylic acid

Waste No.	Description of Hazardous Waste
U137	Indeno[1,2,3-cd]pyrene
U138	Iodomethane
U140	Isobutyl alcohol
U141	Isosafrole
U142	Kepone
U143	Lasiocarpine
U144	Lead acetate
U145	Lead phosphate
U146	Lead subacetate
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile
U150	Melphalan
U151	Mercury
U152	Methacrylonitrile
U153	Methanethiol
U154	Methanol
U155	Methapyrilene(T)
U156	Methyl chlorocarbonate
U157	3-Methylchlolanthrene
U158	4,4'-Methylenebis(2-chloroaniline)
U159	Methyl ethyl ketone
U160	Methyl ethyl ketone peroxide
U161	Methyl isobutyl ketone
U162	Methyl methacrylate
U163	N-methyl-N'nitro-N-nitrosoquanidine
U164	Methylthiouracil
U165	Napthalene
U166	1,4-Naphthalenedione
U167	1-Naphthylamine
U168	2-Naphthylamine
U169	Nitrobenzene
U170	p-Nitrophenol
U171	2-Nitropropane
U172	N-Nitrosodi-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U176	N-Nitroso-N-ethylurea
U177	N-Nitroso-N-methylurea

Waste No.	Description of Hazardous Waste
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U182	Paraldehyde
U183	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachloronitrobenzene
U186	1,3-Pentadiene
U187	Phenacetin
U188	Phenol
U189	
U190	Phthalic anhydride
U191	Pyridine, 2-methyl-
U192	Pronamide
U193	1,3-Propane sultone
U194	1-Propanamine
U196	Pyridine
U197	p-Benzoquinon
U200	Reserpine
U201	Resorcinol
U202	Saccharin and salts
U203	Safrole
U204	Selenium dioxide
U205	Selenium sulfide
U206	Streptozotocin
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2,-Tetrachloroethane
U209	1,1,2,2,-Tetrachloroethane
U210	Tetrachloroethylene
U211	Carbon tetrachloride
U213	Tetrahydrofuran
U214	Thallium(l) acetate
U215	Thallium(l) carbonate
U216	Thallium(l) chloride
U217	Thallium(l) nitrate
U218	Thioacetamide
U219	Thiourea
U220	Toluene

Waste No.	Description of Hazardous Waste
U221	Toluenediamine
U222	o-Toluidine hydrochloride
U223	Toluene diisocyanate
U225	Bromoform
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethene
U234	1,3,5-Trinitrobenzene
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil mustard
U238	Ethyl carbarmate (urethan)
U239	Xylene
U240	2,3-D, salts and esters
U243	Hexachloropropene
U244	Thiram
U246	Bromine cyanide
U247	Methoxychlor
U248	Warfarin, when present at concentrations of 0.3% or less
U249	Zinc phosphide, when present at concentrations of 10% or less
U271	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U278	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	1-Naphthalenol, methylcarbamate
U280	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	o-Toluidine
U353	p-Toluidine
U359	Ethylene glycol monoethyl ether
U364	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U372	Carbamic acid, 1 H-benzimidazol-2-yl, methyl ester
U373	Carbamic acid, phenyi-, 1 -methylethyl ester
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U389	Carbamothioic acid, bis(1-methylethyl)-S-(2,3,3-trichloro-2-propenyl) ester
U394	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	Ethanol, 2,2'-oxybis-, discarbamate
U404	Ethanamine, N,N-diethyl-

Waste No.	Description of Hazardous Waste
U408	2,4,6-Tribromophenol
U409	Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis, dimethyl ester
U410	Ethanimidothioc acid, N,N□-[thiobis(methylimimo)carbonyloxy]bis-,dimethyl ester
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate

*Non-Hazardous Chemicals and Used Oils

Automotive Crankcase Oils
Industrial Lubricating Oils
Ethylene Glycol
Propylene Glycol
Ethylene Glycol 2-Methyl Ether
Dimethyl Acetamide (DMAC)
N-Methyl 2-Pyrrolidone (NMP)
Monoethynolamine
Oleic Acid
N-Ethyl 2-Pyrrolidone (NEP)
Gamma, Butyrolactone (BLO)
1,4-Dioxane
Photographic and Imaging solutions
Non-hazardous 140 and 150 mineral spirits parts washer solvents
Non-hazardous aqueous parts washer solution

*Additional Non-hazardous wastes may be accepted in accordance with condition III(A), II(B)(2), or State Permit No. 1983-10-OP.

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Attachment F

Closure Cost Estimate (1997 Dollars)

Container Storage Units	$5,166,275.00
Decant/Processing Areas	$12,050.00
Tank Storage/Unloading	$3,273,634.00
Incineration	$279,993.00
Support Facilities	$162,238.00
Other Closure Activities (sweep, vacuum pavement, decon equip., etc.)	$46,725.00
Total All Closure Activities	$8,940,915.00

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Attachment G
Scope of Work for a RCRA Facility Investigation

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) of the solid waste management units identified in Section XI of this permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Veolia, "SWMU" refers to Solid Waste Management Unit.

I. PURPOSE

The purpose of the RFI is to determine the nature and extent of releases of hazardous waste or hazardous constituents, if any, from SWMUs located at the Veolia facility in Sauget, Illinois and to gather data necessary to develop and implement a Corrective Measures Program (CMP). Specifically, the information gathered during the RFI will be used to help determine the need, scope and design of a corrective measures program.

II. SCOPE OF WORK

The Scope of Work for the RFI is divided into three phases -- Phases I, II and III.

1. The purpose of Phase I is to provide information on the characteristics and integrity of each unit and conduct field activities, as necessary, to determine if a SWMU(s) at that facility has released, is currently releasing, or has the potential to release hazardous waste and/or hazardous constituents to the soil.

2. Phase II of the RFI will be required if the Agency's DLPC determines from the data obtained in Phase I that, for any SWMU, (1) a release has occurred to the soil, (2) a release is occurring to the soil, groundwater and/or surface water, or (3) the results are inconclusive. The purpose of Phase II is to define the extent of releases to the soil.

3. Phase III will be required if the Agency's DLPC determines from the data obtained in Phase I or Phase II that hazardous wastes or hazardous constituents may have migrated to the groundwater in areas not previously investigated for possible groundwater contamination. The purpose of Phase III is to define the extent of releases both on-site and off-site to the ground water from SWMUs identified in Phase I or II to have potentially released hazardous waste or hazardous constituents to the groundwater.

Each phase of the investigation is divided into three subparts. The first subpart deals with the development of a RFI Workplan. The second subpart is the implementation of the RFI. The final subpart covers the submission of reports documenting the results of the RFI.

III. RFI WORKPLANS

The Permittee shall prepare a detailed workplan for each phase of the RFI which is reviewed and approved by the Agency prior to conducting that phase of the RFI. The workplan for each phase of the RFI must, at a minimum, contain the information identified in III.A-III.H below. The information in the workplan must be presented in a manner which is similar to the format set forth in these sections. Information provided in each Phase of the RFI may be incorporated into the workplan for the subsequent Phase by reference. Information already submitted in the Part B permit application may also be incorporated by reference into the workplans when appropriate, provided a clear reference is made to the location of the information in the application, including page number and date information was submitted..

III.A. INTRODUCTION (required for all workplans)

A general discussion of the contents and goals of each workplan must be provided as an introductory portion of the workplan. This introduction should also discuss, in general, the facility and the SWMUs being investigated.

III.B. ADMINISTRATIVE OUTLINE

The Permittee shall submit as part of the workplan for each phase of the RFI a general outline defining the RFI objectives, technical approach, and scheduling of tasks during that phase of the RFI. The Permittee shall prepare a Project Management Plan as part of each Phase Workplan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the current Phase of the RFI.

III.C. INFORMATION REQUIRED SPECIFICALLY IN THE RFI PHASE 1 WORKPLAN

1. General Facility Information

The following information must be provided, as available, in the Phase I RFI Workplan regarding the facility overall:

a. A description of the facility, including the nature of its business, both past and present. This description should identify (1) the size and location of the facility, (2) the raw materials used and products manufactured at the facility and (3) the Standard Industrial Code which describes the type of activities carried out at the facility;

b. Identification of past and present owners;

c. A discussion of the facility's past and present operations, including solid and hazardous waste generation, storage, treatment and disposal activities;

d. A brief discussion of each of the SWMUs identified in Section XI.

e. A description of all significant surface features (ponds, streams, depressions, etc.) and wells within 1,500 feet of the facility;

f. A description of all land usage within 1,500 feet of the facility, including all known SWMUs;

g. Identification of all human populations and environmental systems susceptible to contaminant exposure from releases from the SWMUs within a distance of at least 1,500 feet of the facility;

h. A description of any interim corrective action measures which were or are being planned or actually being undertaken at the facility;

i. Approximate dates or periods of past spills or releases, identification of material spilled, location and a description of the response actions, including any inspection reports generated as a result of the spill or release.

j. A current topographic map(s) showing a distance of at least 1,000 feet around the facility and other information described below, and at a scale of one inch equal to not more than 200 feet. Contours shall be shown on the map, with the contour interval being sufficient to clearly show the pattern of surface water flow. If such a map is not available, the workplan shall describe the method for generating the map for inclusion in the Phase I report. The map shall clearly show the following:

    1. Map scale, North arrow, date, and location of facility with respect to Township, Range and Section;

2. Topography and surface drainage depicting all waterways, wetlands, 100-year floodplain, drainage patterns, and surface water areas;

3. Property lines, with the owners of all adjacent property clearly indicated;

4. Surrounding land use;

5. Locations and boundaries of (1) all solid waste, including hazardous waste, management units, both past and present, (2) spill areas and (3) other suspected areas of contamination;

6. All injection and withdrawal wells, and

7. All buildings, tanks, piles, utilities, paved areas, easements, rights-of-way, and other features including all known past and present product and waste underground tanks or piping.

The map(s) shall be of sufficient detail and accuracy to locate and report all current and future RFI work performed at the site. The base map(s) shall be submitted in the Phase I report and modified in subsequent reports and workplans as appropriate.

2. Nature and Extent of Contamination

The Phase I Workplan must contain the following information, to the extent known, for each of the units identified in Section XI of the permit:

a. Location of unit;

b. The horizontal and vertical boundaries of each unit;

c. Details regarding the construction, operation and structural integrity of each unit;

d. A description of all materials managed and/or disposed at each SWMU including, but not limited to, solid waste, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility including:

(1) Type of waste or hazardous constituents placed in the units, including source, hazardous classification, quantity and chemical composition;

(2) Physical and chemical characteristics, including physical form, physical description, general chemical class, cohesiveness of the waste;

e. Quantities of solid and hazardous wastes managed at the unit;

f. The history of the utilization of each SWMU and the surrounding areas, including the period of operation and age of the unit;

g. Methods used to close the unit, if applicable;

h. All available data and qualitative information on the level of contamination present at the SWMU;

i. A description of the existing degree and extent of contamination at each unit area.

j. Identification of additional information which must be gathered regarding 2.a through 2.i above.

3. Soil Sampling/Analysis Plan

The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous waste and hazardous constituents into the soil around and under each SWMU in Section Section XI of this permit. To meet this requirement, the plan must identify:

a. The procedures which will be used to describe and characterize the soils in and around the subject SWMU(s) down to the water table, including, but not limited to, the following:

1. Unified Soil Classification;

2. Soil profile; and

3. Elevation of water table;

b. The parameters and hazardous constituents to be used to establish the presence or absence of contamination. These must include, but are not limited to, specific hazardous constituents of wastes known or suspected to have been managed by the SWMU(s) as identified and determined by the unit characterization information presented in the workplan.

c. The basis for selecting the parameters and constituents in (b) above.

d. The methodology for choosing sampling locations, depths, and numbers of samples.

e. Sampling procedures for each parameter or constituent to be analyzed. Unless detailed procedures are otherwise contained in the workplan, all soil samples collected must be handled in accordance with Test Methods for Evaluating Solid Waste, Third Edition and finalized updates (SW-846) and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed.

f. Analytical methods to be used in the analysis of the samples. The procedures set forth in SW-846 shall be followed. Otherwise a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods must be provided.

g. Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.

D. INFORMATION REQUIRED SPECIFICALLY IN THE RFI PHASE II WORKPLAN

1. Soil Sampling And Analysis Plan

A Phase II Soil Sampling and Analysis plan, if necessary, must describe procedures to determine the nature and extent of hazardous waste and/or hazardous constituents released to the soil. This plan shall address and/or include, at a minimum:

(a) A description of what is known about the horizontal and vertical extent of contamination;

(b) A description of relevant contaminant and environmental chemical properties within the affected source area and plume, including solubility,

specification absorption, leachability, exchange capacity biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);

(c) Specific contaminant concentrations, if known;

(d) The horizontal and vertical velocity and direction of contaminant movement (if known);

(e) An extrapolation of future contaminant movement (if known);

(f) The methods and criteria to be used to define the boundaries of the plume(s) of contamination;

(g) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMU's;

(h) The basis for selecting the parameters and constituents in (g) above;

(i) The methodology for choosing sampling locations, depths, and numbers of samples;

(j) Sampling procedures for each parameter or constituent to be analyzed;

(k) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in SW-846, a complete description of the methods to be used and the justification for not using the SW-846 methods shall be provided; and

(l) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

E. INFORMATION REQUIRED SPECIFICALLY IN THE RFI PHASE III WORKPLAN

The potential for release to groundwater must be investigated as part of the Phase III of the RFI if the Agency's DLPC determines from the data obtained during the RFI Phase II investigation that releases to soil from a given SWMU may have migrated to the groundwater below the site, or the data is inconclusive. The RFI Phase III hydrogeologic and geologic investigation plan must provide descriptions of

groundwater monitoring systems which will provide adequate data on the detection, nature, extent and rate, and concentration of any releases to groundwater or surface water.

The information which must be provided regarding the Phase II investigation of hydrogeology and hydrology at each SWMU of concern includes:

1. Information, as it is available, regarding:

   a. The regional geologic and hydrogeologic characteristics in the vicinity of the facility, including stratigraphy, hydrogeologic flow and the areas of recharge and discharge.

   b. Any topographic or geomorphic features that might influence the groundwater flow system;

   c. The hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; and interpretation of hydraulic interconnections between saturated zones, and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;

   d. Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;

   e. The water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and

   f. Any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures within 1500 feet of the facility boundary.

2. Procedures for obtaining information identified above which was not obtained during preparation of the workplan.

3. Documentation that sampling and analysis of groundwater monitoring wells will be carried out in accordance with the approved Data Collection Quality Assurance Plan. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD), where appropriate, and the latest version of the Agency's DLPC design criteria. At a minimum:

   a. The groundwater monitoring wells must consist of monitoring wells installed in the uppermost aquifer and in each underlying aquifer (e.g., sand units) which are hydraulically interconnected;

   b. At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMUs, except to the extent that SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are (a) representative of background quality in the uppermost aquifer and units hydraulically interconnected beneath the facility and (b) not affected by SWMUs at the subject facility; and

   c. Monitoring wells in each appropriate aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. There number, locations and depths must ensure that they allow for detection of releases of hazardous waste or hazardous constituents from the SWMU(s).

4. A sampling plan which specifies:

   a. The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes determined to have been placed in or released from the SWMUs (including any possible degradation products);

   b. The basis for selecting the parameters and constituents in (1) above;

c. The methodology for investigating the hydrostratigraphic units at site, and the locations, depths, and concentration specifications for each monitoring well;

d. Sampling procedures for each parameter or constituent to be analyzed, including sampling frequency;

e. Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods will be provided; and

f. Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

F. SITE-SPECIFIC SAMPLING PLANS

The Permittee shall prepare detailed site-specific sampling plans to be submitted as part of the work for each phase of the RFI which address all field activities needed to obtain site-specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever appropriate, sample collection, handling, preservation, preparation and analysis described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, Third Edition (SW-846) and finalized updates. In addition, samples to be analyzed for volatile organic compounds must be collected in accordance with Illinois EPA's Volatile Sampling. The plans must address all levels of the investigations, as well as types of investigations conducted on specific environmental media (i.e., soil, air, surface water, groundwater). The plans must describe in detail how each phase of the RFI will be implemented.

Site-Specific sampling and analysis plan should contain the following informational:

1. Goals and Objectives of Effort - A discussion of the goals and objectives of the sampling/analysis effort should be included in the plan. This will have an impact on the overall plan, as the sampling/analysis effort required to demonstrate that an area is clean is very different than that required to determine the horizontal and vertical extent of contamination.

2. Parameters to be Analyzed - A list of proposed parameters along with a discussion justifying their inclusions should be included in the plan. The

proposed parameters should include those hazardous constituents which may be present based upon a knowledge of the wastes managed at the unit and the facility overall. This list should include degradation products. Additional parameters for analysis may be required by the Agency, depending on its review of the wastes and other materials managed at the facility.

3. Sample Locations - A scaled map should be provided in the plan showing the location where the samples are to be collected.

4. Sampling Depth - As appropriate, the sampling should identify the depth from which each sample is to be collected.

5. Sample Collection Procedures - The procedures which will be used to collect the samples must be described in the closure plan. The following should be considered in developing these procedures:

   a. Sampling methods and equipment should follow guidance in USEPA's TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL/CHEMICAL METHODS Third Edition and all finalized updates.

   b. Field sampling methods not included in SW-846 must be approved by IEPA before the are used in the closure. This includes methods such as drilling, borings, etc. When available, standards procedures, as defined by USEPA, IEPA or ASTM, should be followed.

   c. Soil and sediment samples collected for volatile organics analysis require specialized sampling and handling procedures, as specified in the Agency's volatile compound sampling procedure. Unless extenuating circumstances dictate otherwise, soil samples collected for volatile organic analysis should not be mixed, composited or otherwise aerated. If extenuating circumstances prevail, then procedures must be made to minimize (1) the time the sample is exposed to the air; (2) aeration of the sample and (3) agitation of the sample. No mixing of compositing of samples should ever take place if they are to be analyzed for VOCs.

   d. All soil encountered during the sampling effort should be field classified in accordance with ASTM D-2488. Provisions should be made in the plan to make this classification, except for samples collected specifically for VOC analysis.

   e. If a drill rig or other piece of equipment is necessary to collect soil samples:

(1) The procedures specified in ASTM Method D-1586 (Split Spoon Sampling) or D-1587 (Shelby Tube Sampling) must be used in collecting the samples;

(2) Soil samples should be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.

f. Soil and sediments encountered in an area where VOC contamination is a concern should be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory should not be field-screened.

g. In general, samples should never be composited.

h. The procedures which will be used to decontaminate the sampling equipment after each sample is collected should also be described. Decontamination procedures should be carried out in accordance with SW-846.

i. The actual material placed in the container for future analysis should be obtained from any visually contaminated portion of the sample.

6. Sample Handling Procedures - The sampling plan should describe the procedures which will be used to store, preserve and transport the collected soil samples to the laboratory, including chain-of-custody procedures. These procedures should be carried out in accordance with the guidance in SW-846, Third Edition, and all finalized updates.

7. Analytical Procedures - The sampling/analysis plan should identify the procedures which will be used to prepare the samples for analysis and to analyze them. In general, such procedures should be carried out in accordance with those set forth in SW-846, and all finalized updates. The actual portion of the sample to be analyzed should be obtained from visually contaminated material if any is present. The procedures specified must be sufficient to analyze for all the parameters identified in the closure plan. The estimated quantitation limits and/or practical quantitation limits to be achieved should also be identified. Again, these limits should meet the requirements set forth in SW-846. It must be noted that it is especially important to achieve low detection limits if the goal of the sampling/analysis effort is to demonstrate that little or no contamination exists in a given area. To demonstrate a parameter is not present in a sample, the PQL achieved must be at least as low as that specified in SW-846. Low

detection limits may not be as necessary when collecting samples in contaminated areas.

8. Any additional items required in the other portions of this section regarding the sampling/analysis of specific environmental media.

G. DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan which describes the procedures which will be used to carry out and monitor all sampling and analysis efforts to ensure that all information and data collected are technically sound, statistically valid and properly documented. Such a plan, referred to as a Quality Assurance Project Plan, must be developed using a format in which the fourteen items listed below are discussed in detail:

1. Project Description
2. Project Organization and Responsibility
3. Quality Assurance Objectives for Data Measurements
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures and Frequency
7. Analytical Procedures
8. Data Reduction, Validation and Reporting
9. Internal Quality Control Audits
10. Performance and System Audits
11. Preventative Maintenance
12. Specific Routine Procedures Used to Assess Data Precision, Accuracy and Completeness
13. Corrective Action

14. Quality Assurance Reports to Management

Of special concern in the development of a QAPP are (1) the use of trip blanks, field blanks and laboratory blanks and (2) calibration and verification of the laboratory procedures and equipment used to analyze the samples. All procedures used in this RFI must meet the requirements of Test Methods for Evaluating Solid Wastes, Third Edition (SW-846) and all finalized updates. As such, the quality assurance/quality control procedures carried out during the RFI must meet the requirements set forth in SW-846.

H. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The Plan shall also provide the format to be used to present the raw data and conclusions of the investigation(s). This plan shall be submitted with each Phase Workplan.

I. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations. These requirements must be met during each phase of the RFI. A detailed Health and Safety Plan demonstrating that his requirement is met must be contained in the workplan for each phase of the RFI.

IV. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and

sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report required by Section V subsequent to the determination of need or actual deviation from the Workplan.

V. SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES

A. Quarterly Report

The Permittee must prepare and submit quarterly progress reports on the activities and results of each Phase of the RFI activities as appropriate. The progress reports shall contain at a minimum:

1. An estimate of the percentage of the investigation completed;
2. Summary of activities completed during the reporting period;
3. Summaries of all actual or proposed changes to the Workplan or its implementation;
4. Summaries of all actual or potential problems encountered during the reporting period;
5. Proposal for correcting any problems;
6. Projected work for the next reporting period; and
7. Other information or data as requested in writing by the Agency's DLPC.

B. General Contents of Final Reports

Reports documenting the results of each phase of the RFI should be developed in accordance with the following:

1. The portion of the report documenting the results of the required soil/air/surface water/sediment/sampling/analysis effort should contain the following:

a. A discussion of: (1) the reason for the sampling/analysis effort conducted at each WMU and (2) the goals of the sampling analysis effort conducted at each WMU;

b. A scaled drawing showing the horizontal and vertical location where all samples were collected relative to each SWMU and/or other relevant structures;

c. Justification for the selected sample locations;

d. A description of the procedures used for:

(1) Sample collection;

(2) Sample preservation;

(3) Chain of custody; and

(4) Decontamination of sampling equipment;

e. Visual classification of each soil sample collected for analysis;

f. A discussion of the results of any field screening efforts;

g. Logs of all soil borings made during the investigation;

h. A description of the soil types encountered during the investigation, including scaled cross-sections;

i. A description of the procedures used to analyze the samples, including:

(1) The analytical procedure used, including the procedures, if any, used to prepare the sample for analysis;

(2) Any dilutions made to the original sample;

(3) Any interferences encountered during the analysis of each sample; and

(4) The practical quantitation limit (PQL) achieved, including justification for reporting PQLs which are above SW-846 levels.

j. A description of all quality control/quality assurance analyses conducted, including the analysis of lab blanks, trip blanks and field blanks;

k. A description of all quality assurance/quality control efforts made overall;

l. A tabular summary of all analytical data, including QA/QC results;

m. Copies of the final laboratory sheets which report the results of the analyses, including final sheets reporting QA/QC data;

n. Colored photographs documenting the sampling effort; and

o. A discussion of the collected data. This discussion should (1) identify those sample locations where contaminants were detected and the concentrations of the contaminants and (2) evaluate the data collected. This discussion should focus on the data collected during the recent investigation and on data previously collected.

2. The portion of the final report documenting the results of the required subsurface and groundwater investigation should contain, at a minimum, the following information for each WMU:

a. Logs of the borings made during the required subsurface investigation and/or for monitoring well installation;

b. A description of the procedures used in carrying out the subsurface investigation (including the boring procedures) and in any installation of the monitoring wells;

c. Results of all tests conducted in-situ or in the laboratory and a discussion of the procedures used in carrying out the tests;

d. Completed IEPA Well Completion Reports;

e. Scaled drawings showing the location where all borings were made and where all monitoring wells were installed;

f. Well development procedures;

g. A discussion of the geology and hydrogeology of the areas being investigated, including:

(1) A detailed description of the geology;

(2) Physical characteristics of each geologic strata encountered;

(3) Identification of water bearing units encountered;

(4) Depth to the water table;

(5) The horizontal and vertical components of groundwater flow in the water bearing units;

(6) The hydraulic conductivity of the water bearing units.

h. A minimum of two cross-sections depicting the subsurface geology and hydrogeology. These cross-sections should be as close to perpendicular to each other as possible, so that a three-dimensional presentation of this information can be depicted;

i. Information regarding the groundwater sampling/analysis effort as identified in Items 1.a, 1.d, 1.f, 1.h, thru 1.l and 1.n above;

j. Water level measurements made prior to the collection of the groundwater samples; and

k. Maps and supporting data identifying the piezometric surface of the groundwater beneath the facility and the direction of groundwater flow.

C. Schedule for Submitting Documents

The workplans and reports which must be submitted to the Agency for review and approval in accordance with the schedule set forth in the following table:

Facility Action	Due Date
Submission of RFI Phase I Workplan	Within 90 days after effective date of the order
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	To be specified in the Phase I Workplan
Submission of RFI Phase II Workplan	Within 60 days after notification of the need of Phase II by Agency's DLPC

Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be specified in the Phase II workplan
Submission of RFI Phase III Workplan	Within 60 days after notification of the need for Phase III
Completion of RFI Phase III investigation and submission of Phase III Report and Summary	To be specified in the Phase III Workplan

Quarterly Progress Reports	Report for the Quarter of	Submitted to the Agency by the following
	January - March	May 1
	April - June	August 1
	July - September	November 1
	October - December	February 1

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Attachment H
Corrective Measures Program Requirements for Veolia

1.0 INTRODUCTION/PURPOSE

At the end of a RCRA Facility Investigation, the concentration of contaminants present at a SWMU or other area of concern is typically compared to corrective action objectives developed in accordance with 35 Ill. Adm. Code 742. If the contaminant levels are above these objectives, then some type of corrective measure must be completed to achieve these objectives. In addition, certain corrective measures may need to be carried out to support the corrective action objectives (i.e., the establishment of engineered barriers and/or institutional controls).

While the above scenario is typically carried out at the end of an RFI for a given SWMU, it is not always the case. Specifically, if waste is to remain in place at a SWMU and it will be closed as a landfill, then the corrective measure for that SWMU would consist of: (1) construction of a final cover over the SWMU; and (2) post-closure care (including groundwater monitoring and as necessary, groundwater remediation) of the closed unit.

This document describes the procedures which must be followed to complete the necessary corrective measures for the SWMUs at the Veolia facility in Sauget, Illinois. These procedures, in total, are typically referred to as a Corrective Measures Program (CMP).

2.0 BRIEF OVERVIEW OF THE REQUIRED CORRECTIVE MEASURES PROGRAM

As indicated above, Veolia may eventually be required to develop and implement a corrective measures program to address contamination encountered during the RFI conducted at its facility in Sauget, Illinois. To allow for a logical and orderly implementation, the CMP should be implemented in five phases which build on each other. However, it is not necessary for the CMP at a given SWMU or other areas of concern to follow these five phases step-by-step. Rather, phases can be combined and/or skipped, depending on the actual corrective measure selected. The overall CMP implemented must set forth a logical path for its implementation and allow for Illinois EPA oversight and approval throughout the entire process.

A brief discussion of the typical five phases of a CMP is as follows:

1. Phase I is the conceptual design of the selected corrective measure(s).

2. Phase II is the development of final design plans for the corrective measure, including installation and operation/maintenance plans.

3. Phase III is the actual construction/installation of the selected corrective measure.

4. Phase IV is the operation, maintenance, and monitoring of the selected corrective measure to ensure it is properly protecting human health and the environment.

5. Phase V is the final demonstration/verification that the implemented corrective measure: (1) achieved the approved corrective action objectives; or (2) post-closure care for any SWMU closed as a landfill has been properly implemented.

Sections 3.0 through 7.0 which follow provide a more detailed discussion of each of these five phases. Section 8.0 has been developed to describe the corrective measures program which should be used in lieu of the afore-mentioned five phase procedure when soil removal is the selected remedy.

It must be noted that work plans, reports, etc. must be developed to document how the Permittee carries out the required corrective measures program at each SWMU or other areas of concern. All such documents must be reviewed and approved by Illinois EPA prior to their implementation.

3.0 PHASE I OF THE CMP

Phase I of the CMP includes selection of the corrective measure to be taken and developing a basis for completing the final design of the measure. This effort should be documented in a Conceptual Design Report which describes the proposed corrective measure for each SWMU and other areas of concern and provides a conceptual design for these measures. Typically, the main criteria for Illinois EPA review is whether the proposed corrective measures are able to achieve the final corrective action objectives previously established by the Permittee and the Illinois EPA and/or provide the necessary institutional controls to prevent the migration of contaminants from the SWMU of concern. However, this would not be the case if the selected corrective measure was closing the unit as a landfill and then providing adequate post-closure care (under this scenario, the main criteria for review could be ensuring the adequacy of the final cover system and post-closure care program).

The Conceptual Design Report should contain the following sections:

1. Introduction/Purpose. This section should contain: (1) general background information regarding the project; (2) the purpose and goals of the submittal; and (3) the scope of the project.

2. Existing Site Conditions. This section should contain a summary of the investigative activities conducted for each of the units of concern. Investigation analytical results should be provided in tabular form, and maps depicting both the horizontal and vertical extent of contamination at the site should be provided.

3. Evaluation for Potential Future Migration. Based on the existing site conditions, a conceptual model of the site should be developed and presented in this section. The potential for additional future migration of contamination for each of the units of concern must then be evaluated, especially those units which have been determined to have released hazardous waste/hazardous constituents to the groundwater. It may be helpful to develop conceptual models for contaminant migration. Of special concern in this evaluation are (1) the physical properties of the contaminants (solubility, volatility, mobility, etc.); and (2) existing site conditions (types of soil present, location of contamination, hydrology, geology, etc.).

4. Identification of Options Available. This section should contain a brief discussion of the various options available to achieve the corrective measures objectives for each unit. This discussion should identify: (1) a general overview of each option available, including how the option will achieve the stated objective; (2) the advantages associated with each option; (3) the disadvantages associated with each option and (4) an estimate of the cost associated with choosing each remedial option.

5. Description of Selected Corrective Measure. This section should contain a qualitative discussion of the corrective measure chosen, along with the rationale which was used to select this measure from all those identified initially. This discussion should include documentation that the selected corrective measure will be effective.

6. Corrective Measures Objectives. In general, this section should discuss the general objectives of the proposed corrective measure to be constructed/installed, and the ability of the proposed corrective measure to achieve the established corrective action objectives. If the selected corrective measure is closure as a landfill which will require proper establishment of a final cover and proper post-closure care of the closed unit, then this section should discuss the general objectives of the proposed closure/post-closure effort.

7. Identification of Design Criteria. This section should identify what information must be available to design the selected corrective measure.

8. Review of Available Information. This section should contain an evaluation of the existing information to ensure that it is sufficient to complete the design of the selected corrective measure. If insufficient information is available, then the report should contain procedures for collecting the required additional information.

9. Procedures for Completing the Design. This section should contain a description of the procedures which will be followed to complete the design of the corrective measure. This should include as appropriate:

   a. Identification of the references and established guidance which will be used in designing the selected corrective measure. Justification for the selection of this procedure should also be provided.

   b. A description of the procedures which will be used to complete the design of the corrective measure.

   c. Identification of assumptions to be used in the design, and the impact these assumptions have on the overall corrective measure;

   d. Significant data to be used in the design effort;

   e. Identification and discussion of the major equations to be used in the design effort (including a reference to the source of the equations);

   f. Sample calculations to be used in the design effort;

   g. Conceptual process/schematic diagrams;

   h. A site plan showing a preliminary layout of the selected corrective measure;

   i. Tables giving preliminary mass balances;

   j. Site safety and security provisions.

   This information will form the technical basis for the detailed design of the remedial measure and the preparation of construction plans/specifications.

10. Identification of Required Permits. This section should identify and describe any necessary permits associated with the selected corrective measure, as well as the procedures which will be used to obtain these permits.

11. Long-lead Procurement Considerations. This section should identify any elements/components of the selected corrective measure which will require a large amount of time to obtain/install. The following issues should also be discussed: (1) the reason why it will take a large amount of time to obtain/install the item; (2) the length of time necessary for procurement and (3) recognized sources of such items.

12. Project Management. This section should contain information regarding the procedures and personnel which will be involved in completing the design of the selected corrective measure. A schedule for completing the design should also be provided.

4.0 PHASE II OF THE CMP

Once the Illinois EPA approves the Conceptual Design Report, the facility should complete the design of the approved corrective action (Phase II of the CMP). Upon final completion of the design, a Final Design Report, consisting of final plans, specifications, construction work plan, etc., must be submitted to the Illinois EPA for review and approval.

Several documents must be submitted to the Illinois EPA as part of Phase II of the CMP. The following text describes the expected contents of the various documents which should be developed and submitted to the Illinois EPA as part of Phase II of the CMP.

1. Final Design Report and Construction Work Plan. The Final Design Report and Construction Work Plan must contain the detailed plans, specifications and drawings needed to construct the corrective measure. In addition, this document must contain (1) calculations, data etc., in support of the final design; and (2) a detailed description of the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. It must be noted that the approved Conceptual Design Report forms the basis for this final report. The information which should be provided in this document includes:

    a. Introduction/Purpose. This portion of the document should: (1) provide background information regarding the project, (2) describe the purpose and goals of the project, and (3) describe the scope of the project.

    b. Detailed Plans of the Design System, including the following:

        1. Plan views;

        2. Section and supplementary views which, together with the specifications and general layouts, facilitate construction of the designed system;

        3. Dimensions and relative elevations of structures;

        4. Location and outline form of the equipment;

        5. Ground elevations; and

6. Descriptive notations, as necessary, for clarity.

c. Technical Specifications. Complete technical specifications for the construction of the system, including, but are not limited to, the following:

1. All construction information, not shown in the drawings, which is necessary to inform the contractor in detail as to the required quality of materials, workmanship, and fabrication of the project;

2. The type, size, strength, and operating characteristics of the equipment;

3. The complete requirements for all mechanical and electrical equipment, including machinery, valves, piping and jointing of pipe;

4. Electrical apparatus, wiring and meters;

5. Construction materials;

6. Chemicals, when used;

7. Miscellaneous appurtenances;

8. Instruction for testing materials and equipment as necessary; and

9. Availability of soil boring information.

d. Project Management. A description of the construction management approach, including the levels of authority and responsibility, lines of communication and qualifications if key personnel who will direct corrective measures construction/installation must be provided in the work plan.

e. Construction Quality Assurance/Quality Control. A construction quality assurance/quality control plan describing the procedures which will be followed to ensure the corrective measure is constructed/installed in accordance with the approved plans and specifications.

f. Schedule. The work plan must contain a schedule for completion of all major activities associated with construction/installation of the selected corrective measures. All major points of the construction/installation should be highlighted.

g. Waste Management Practices. This portion of the document should identify the wastes anticipated to be generated during the construction/installation of the

corrective measures, and provide a description of the procedures for appropriate characterization and management of these wastes.

h. Required Permits. Copies of permit applications submitted to other Bureaus of the Illinois EPA for the selected corrective measure must be provided in the report. If it is determined that no permit is required for construction/installation and implementation of the corrective measures, rationale and justification must be provided to support this contention.

i. Cleanup Verification. The report must contain the procedures which will be followed that the approved remediation objectives have been achieved when operation of the system is completed.

2. Operation and Maintenance Plan. An Operation and Maintenance Plan must be developed and submitted as part of Phase II of the CMP. This plan should outline the procedures for performing operations, long term maintenance, and monitoring of the corrective measure.

a. Introduction and Purpose. This portion of the document should provide a brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.

b. System Description. This portion of the document should provide a description of the corrective measure and significant equipment, including manufacturer's specifications. This portion of the permit should also include a narrative of how the selected system equipment is capable of complying with the final engineered design of the corrective measure.

c. Operation and Maintenance Procedures. This portion of the document should provide a description of the normal operation and maintenance procedures for the corrective measures system, including:

1. Description of tasks for operation;

2. Description of tasks for maintenance;

3. Description of prescribed treatment or operation conditions; and

4. Schedule showing the frequency of each operation and maintenance task.

d. Inspection Schedule. This portion of the document should provide a description of the procedures for inspection of the corrective measures system, including

problems to look for during the inspection procedure, specific inspection items, and frequency of the inspections.

e. Waste Management Practices. This portion of the document should provide a description of the wastes generated by the corrective measure, and the appropriate procedures for proper characterization/management of these wastes.

f. Contingency Procedures. This portion of the document should provide a description of the procedures which will address the following items:

1. System breakdowns and operational problems including a list of redundant and emergency backup equipment and procedures;

2. Alternative procedures (i.e., stabilization) which are to be implemented in the event that the corrective measure fails. The alternative procedures must be able to prevent release or threatened releases of hazardous wastes/hazardous constituents which may endanger human health and the environment, or exceed cleanup standards.

3. Notification of facility and regulatory personnel in the event of a breakdown in the corrective measures, including written notification identifying what occurred, what response action is being taken and any potential impacts on human health and the environment.

5.0 PHASE III OF THE CMP

Once the final design report is approved by the Illinois EPA, construction/installation of the approved corrective measure must commence. During this period, quarterly reports should be submitted which contain the following information:

1. Summary of activities completed during the reporting period;

2. An estimate of the percentage of the work completed;

3. Summaries of all actual or proposed changes to the approved plans and specifications or its implementation;

4. Summaries of all actual or potential problems encountered during the reporting period;

5. Proposal for correcting any problems; and

6. Projected work for the next reporting period.

Upon completion of construction/installation of the approved corrective measure, (including construction of a final cover system over a SWMU being closed as a landfill and establishment of the approved groundwater monitoring program) a Construction Completion Report must be submitted to the Illinois EPA documenting that these efforts were carried out in accordance with the Illinois EPA approved plans and specifications. This report should contain a thorough description of the efforts that went into constructing/installing the corrective measure and demonstrate that the procedures in the Illinois EPA-approved Final Design Report were followed during this effort. Such a report should be formatted in a logical and orderly manner and contain the following information:

1. An introduction discussing the background of the project and the purpose and scope of the corrective measure described in the report.

2. Identification of the plans, technical specifications and drawings which were used in constructing/installing the corrective measure. These specifications and drawings should have been approved by the Illinois EPA during Phase II.

3. Identification of any variations from the Illinois EPA approved plans, technical specifications and drawings used in construction/installing the corrective measure. Justification regarding the need to vary from the approved plans and specifications must also be provided.

4. A description of the procedures used to construct/install the corrective measure, including the procedures used for quality assurance and quality control.

5. As-built drawings, including identification of any variations from the approved plans, technical specifications and drawings.

6. A summary of all test results from the construction/installation effort, including quality assurance/quality control testing.

7. Actual test results, including quality assurance/quality control test results. These results should be located in an attachment/appendix and be well organized.

8. Identification of any test results which did not meet the specified value and a description of the action taken in response to this failure, including re-testing efforts.

9. Photographs documenting the various phases of construction.

10. A detailed discussion of how the construction/installation effort met the requirements of the approved Final Design Report.

11. A certification meeting the requirements of 35 Ill. Adm. Code 702.126 by an independent qualified, licensed professional engineer and by an authorized representative of the owner/operator.

6.0 PHASE IV OF THE CMP

Once the corrective measure has been constructed/installed, it must be operated, maintained and monitored in accordance with the approved plans and specifications (this is Phase IV of the CMP). During this period, quarterly reports must be submitted to the Illinois EPA documenting the results of these efforts (including the required post-closure efforts for SWMUs closed as landfills). These reports include the following:

1. Introduction. -- A brief description of the facility operations, scope of the corrective measures project, and summary of the project objectives.

2. System Description. -- A description of the corrective measures constructed/installed at the site, and identify significant equipment. Describe the corrective measure and identify significant equipment.

3. Monitoring Results. -- A description of the monitoring and inspection procedures to be performed on the corrective measures (including the required post-closure efforts for SWMUs closed as landfills). A summary of the monitoring results for the corrective measures, including copies of any laboratory analyses which document system effectiveness, provide a description of the monitoring procedures and inspections performed, and include a summary of the monitoring results for the corrective measure. Copies of all laboratory analytical results which document system monitoring must be provided.

4. Effectiveness Determination. -- Calculations and other relevant documentation which demonstrates the effectiveness of the selected corrective measure in remediating/stabilizing contamination to the extent anticipated by the corrective measures final design. Copies of relevant analytical data should be provided to substantiate this determination.

5. System Effectiveness Recommendation. -- Based upon the results of the effectiveness determination required under Item 4 above, recommendations on continued operation of the corrective measure must be provided. If the corrective measure is not performing in accordance with the final design, a recommendation on revisions or

expansion of the system should be provided. Additionally, based upon the monitoring results, a schedule for achieving the cleanup standards would be included with each determination.

7.0 PHASE V OF THE CMP

Once all corrective measures have been completed, a report must be developed documenting all the efforts which were carried out as part of implementing the corrective measure and demonstrating, as appropriate, that the approved corrective action objectives have been achieved. If the selected corrective measure was closing the SWMU as a landfill and then providing post-closure care, this report would be submitted at the end of the post-closure care period and this report would contain information demonstrating that post-closure care of the unit had been carried out in accordance with the approved plan.

8.0 PROCEDURES WHICH SHOULD BE FOLLOWED WHEN SOIL REMOVAL IS THE SELECTED CORRECTIVE MEASURE

Sections 3 through 7 above describe the procedures which should be followed when it is necessary to design some type of physical corrective measure (e.g., a final cover system, some type of treatment system, etc.). However such detail is not necessary if excavation/removal is selected as the remedial action for the contaminated soil encountered at the site. In general, a work plan should be developed for this effort (for Illinois EPA review and approval) which fully describes each step to be used in removing the contaminated soil from the property. This includes a description of (1) the equipment utilized in the removal effort, (2) the pattern followed in removing the soil; (3) the depth to which the soil will be removed; (4) management of the soil on-site after it is removed from the ground; (5) loading areas; (6) the ultimate destination of the soil; and (7) any other steps critical to the removal effort.

One way to conduct a soil removal effort is to collect and analyze a sufficient number of soil samples to clearly determine the horizontal and vertical extent of soil contamination prior to conducting the soil removal effort. The boundaries of soil which must be removed are defined by the Illinois EPA established cleanup objectives for the project. Soil excavation must extend to sample locations where soil test results indicate that the remediation objectives are met. Closure verification sampling is not necessary in such cases, if a registered professional engineer oversees the soil removal effort and certifies that the remediation limits extend to these boundaries.

Another way to conduct a soil removal effort is to collect and analyze a limited number of soil samples prior to the soil removal effort and to rely mainly on field observation to

determine the extent of the soil removal. In such cases closure verification sampling is necessary. Soil samples must be collected for analysis from the bottom and sidewalls of the final excavation. The following sampling/analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives:

1. A grid system should be established over the excavation.

2. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.

3. Samples should be collected at 6"-12" below the ground surface (bgs) along the excavation sidewalls at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.

4. Collection/analysis of all required samples must be in accordance with the procedures set forth in the approved plan.

5. Soil samples which must be analyzed for volatile organic compounds (VOCs) should be collected using Attachment A of the Illinois EPA RCRA closure plan guidance (November 1994). In addition, such samples must be collected 6"-12" beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

6. No random sampling may be conducted to verify achievement of cleanup objectives have been met.

7. Additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established cleanup objectives. Additional samples must be collected and analyzed in accordance with the procedures described above from areas where additional soil has been removed.

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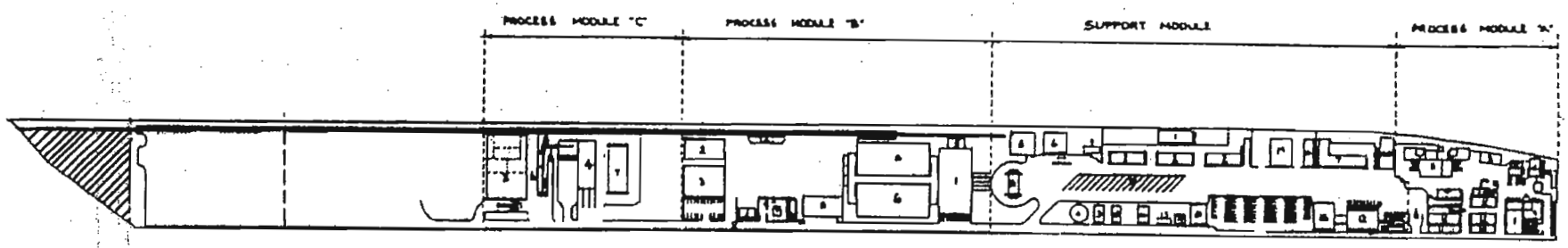
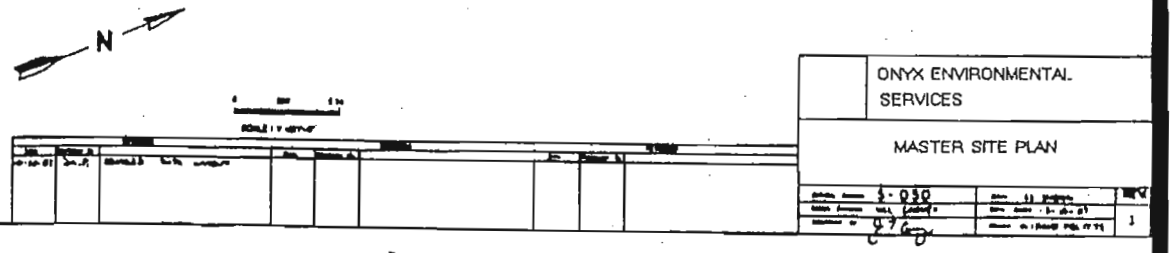


Ground cover (Area 2)

Please note that the remainder of the facility is Area 1.



Attachment J
B-29R
Onyx Facility Layout